

Livestock & Dairy Journal
1912

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THE LIVE STOCK ***and DAIRY JOURNAL***

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

JANUARY, 1912



MAY OF WILLOW CREEK 2nd (147760)

Berkshire Sow which weighed 445 lbs. at 14 months. Owned by H. L. Murphy, Perkins, Cal.

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THE LIVE STOCK and DAIRY JOURNAL

The Big Live Stock
Dairy and Poultry
Magazine of the
Pacific Coast
Established 1901

Volume 11

SACRAMENTO, JANUARY, 1912

Number 1

A Review of the Live Stock Situation

(From an Address by Murdo Mackenzie, President, at the Fifteenth Annual Convention of the American National Live Stock Association, Denver, December 14, 1911.)

"As I am about to leave the United States, having accepted a position in South America, my thoughts naturally revert to the wonderful changes and development in the live stock industry of the United States since I came to this country twenty-seven years ago. My experience with the live stock industry has been entirely in the West, and mostly in what is understood to be the range end of the business, the companies I have represented operating ranches in Colorado, New Mexico, Texas, South Dakota and Canada.

"Our population has increased, while the production of live stock has either been at a standstill or, in some states, decreased; and this country is now more nearly consuming its production of meat food products than ever before in its history.

"Thirty years ago, and even up to within the past few years, the one great problem confronting us was the disposition of our surplus meat food products. Our export trade in meat food animals and their products commenced to grow early in the eighties, and reached a volume of a quarter of a billion dollars annually in 1900. It remained about stationary at that value until about 1908 and 1909, when a marked shrinkage began, and for the year 1911 our exports of cattle are likely to be less than they were in any year since 1885, and our exports of fresh meats for this year will be less than in any year since 1878. Notwithstanding this remarkable decrease, the total value of our exports of meat animals and meat food products for 1911 will probably reach a value of \$150,000,000, of which the products of the hog represent about 60 per cent, the greatest decrease being in live cattle and fresh beef. Our exports of meat products this year are approximately 25 per cent greater than in 1910, indicating plainly that we are still among the great exporting nations of these products.

"The most forceful factor promoting and sustaining the marvelous development of our live stock industry during the past thirty-five years has been the foreign demand for our meat products. Without that demand the expansion in our industry would have been impossible, and the phenomenal prosperity and growth of this nation might not have taken place. In the earlier history of our national life we imported more than we exported, and got into debt to other nations; in later years the development of our agricultural and live stock resources gave us a large surplus, which enabled us to repay that debt and pile up a trade balance in our favor. The future may hold in store for this country many

periods of abundant and long-continued good times, but I doubt whether generations to come will ever enjoy more general prosperity among all classes than occurred during the time of the initial development of our agricultural resources and our large exports of those products.

"Conditions have been changing swiftly the past few years. We no longer have the immense surplus of grain and meat food products pressing on the markets of the world. We are still exporting these products, and shall no doubt continue to do so, but never in the volume of former years.

"Since coming to this country I have seen the establishment of many new stockyards, the abandonment of old live stock trails, the building of the superb railroad systems throughout the West, the improvement of the class of stock on the range, and, in fact, a general evolution in the conduct of the range industry, down to its present systematic and business-like basis. I have noted the building of the great packing houses at Fort Worth, Denver, Oklahoma City and at numerous other interior points, and the enlargement of the big plants at Missonri River and Chicago—all to accommodate the growth of our industry. The improvement in the methods of marketing our products from the purchaser to the consumer has been coincident with the economical growth of these big packing concerns. To them is largely due the credit for increasing and fostering our export trade. Without such instrumentalities of trade we could not have marketed abroad our immense surplus. They studied the desires of the foreign consumers and, so far as possible, met the requirements. Small local slaughtering establishments could not successfully undertake to handle this great export trade; and I think we should accord these big packing concerns this just credit in disposing of our surplus. Like other great commercial institutions, they have bought their so-called raw material as cheaply as possible, and sold it as finished food products to the best advantage. That is what all business men, even we live stock men, are trying to do. Our safeguard from the rapacity of their commercial instinct lies in the competition of the thousand small independent packing plants throughout the country, and we should welcome the advent of any new competition for our products.

"I have seen many periods of disastrous prices for live stock in this country; I have sold cows at prices which netted but little more than the cost of marketing them; and I con-

gratulate you that our industry seems to have reached an era of more stable and profitable prices. Barring violent fluctuations in prices, I believe I may conservatively state that prices for live stock on the hoof today average 20 per cent higher than during the years preceding and following the time when I embarked in the live stock business twenty-seven years ago. This does not mean that the stock raiser is making that much more out of the business. On the contrary, I believe the raising of live stock on the range, and the finishing of it in the feed lots does not yield much greater profits, on the basis of present prices, with the possible exception of this year, than twenty years ago with lesser prices. Our land is more valuable; labor costs more; all the multiple petty expenses of living are higher; corn, cotton seed meal, hay and all forage crops command a higher price, and consequently the stockman must continue to receive remunerative returns for his stock or he will be forced out of the business.

"While the producer is receiving, on an average, more for his stock today than in former years (unless it be the sheepmen, who are suffering from very low prices), he does not receive enough to explain the relatively much higher prices paid by the consumer. Indeed the margin between what the producer receives for his live stock and what the consumer pays for meat products has widened pronouncedly in the past decade. There have been many reasons assigned for this, but none are satisfying or convincing.

"The stockmen of the country honestly believe they are not receiving more than a fair return, and they court the most rigid investigation into their industry. In justice to us, Congress should carefully investigate this question before hastily passing any tariff legislation on the theory that it would reduce prices. Free meats might reduce the price the stockman receives for his stock, and still not be reflected in the price paid by the consumer.

"This question of free meats from Argentine, free cattle from Canada and Mexico, is the most important question that has ever confronted the live stock industry. I believe this association should at once take proper steps to see that every stockman and farmer throughout the West was fully informed of the disastrous effect that the free admission of meats from South America would have on home prices.

"Statistics relative to the live stock of the United States at the thirteenth decennial census, April 15, 1910, are

now available. Compared with 1900 they show a decrease of approximately 6,500,000 head of cattle of all kinds, or about 10 per cent; a decrease of about 5,000,000 head of hogs, or about 8 per cent; a decrease of about 9,700,000 head of sheep and lambs, equivalent to about 16 per cent. The enumeration of the live stock census for 1910 was taken on April 15th, while in 1900 it was taken on June 1st, and on account of this difference in dates the results are not safely comparable and do not reflect the actual situation. Allowing for the young stock dropped in the six weeks between April 15th and June 1st, it is probable that there was only a slight decrease in the number of hogs and sheep and lambs on farms and ranches in 1910, compared with 1900, while there was a large decrease in beef cattle. There seems to be no reasonable doubt that there are fewer meat food animals in the United States today than ten years ago. This explains why our exports have decreased. It also carries a deep significance well worth the careful consideration of economists and legislators.

"The capacity of this country for the production of live stock has not decreased; indeed, I am sure, had we enjoyed the stimulus of profitable prices we could have enlarged the production of live stock during the past ten years without overtaxing our ranches and farms. The natural query which arises in the minds of those not familiar with the raising and marketing of live stock is: Why does not this country raise more live stock? The answer is simple, and I think conclusive. The net returns on the capital invested and the labor employed in breeding, raising and fattening live stock for market have not been as great as those in other branches of agriculture, trade or manufacturing. Consequently the capital and labor employed in stock raising have sought other avenues for investment and work. Human nature is much the same the world over. No man can be expected to continue long in any business after he discovers to his own satisfaction that he can secure better returns doing something else. If the prices for raising live stock during the past ten years had yielded better returns we should today have more live stock in this country than ten years ago.

"In this connection I wish to make a further pertinent suggestion: That if Congress should place our products on the free list, and thus cause a lessening in the now narrow margin of profit enjoyed by the stockmen, there will be a further shrinkage in live

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Officers and Directors:

R. D. McFARLAND, PETER J. SHIELDS
VICTOR E. KOHLER, DAVID FINCH
CHARLES L. HUGHES

R. D. McFARLAND, Managing Editor
CHAS. L. HUGHES, Business Manager

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If you want to buy or sell any stock or merchandise in the great live stock, dairy and poultry centers of the Pacific Coast, get in touch with our advertising columns. We believe all advertising in this paper to be from persons or firms of the highest reliability. Every effort is made to protect our readers against misleading representation. We shall at all times appreciate evidence that advertisers have acted otherwise than in accordance with principles of strict business integrity.

The Journal is issued on or about the 5th of each month. Copy for all reading and advertising matter must be in our office not later than the 25th of month preceding date of issue.

FOREST SERVICE URGES STOCKMEN TO CO-OPERATE

The forest service is showing a very commendable policy in urging stockmen to co-operate with it in the management of grazing affairs in the national forests.

In an address before the National Wool Growers' Association at Omaha, Associate Forester A. F. Forest called attention to the fact that there are sixty-eight advisory boards, representing local live stock associations, which are co-operating effectively with the forest service. Advisory boards of both the American National Live Stock Association and the National Wool Growers' Association are being regularly consulted, and are giving valued assistance with regard to matters which affect the interests of stockmen as a whole.

Co-operation makes it possible to take up vital problems and successfully handle them to the best advantage of all concerned.

Fred A. Ellenwood, Secretary of the California Wool Growers' Association, is making a very commendable fight in behalf of the wool growers of the West in the matter of tariff legislation. Mr. Ellenwood went to Omaha and took a prominent part in the convention of the National Wool Growers' Association, where he was one of the principal speakers. From there he went to the national capital to present his arguments regarding tariff matters.

There is every necessity for a tariff that will fully protect the sheep interests of this country, and if the wool growers are given the worst of it in the readjustment now under consid-

eration it will not be the fault of the energetic Mr. Ellenwood.

It is only in recent years that the practice of testing grade dairy cows has been practiced to any extent, yet a great proportion of the dairymen of the country have become convinced that dairying cannot be profitably and successfully carried on without testing, and converts are daily being won to the cause.

We have personally observed several intelligent dairymen who were making some money at dairying before they were prevailed upon to test their herds. Cows that were thought to be among the most profitable were found to be barely paying their board. In an instance of this kind it is hard to convince a man, but there is no getting away from the figures when records are properly kept. In the average herd testing will reveal the fact that the owner would be just as well off financially—often better off—if he were rid of certain cows, without taking into account the labor of caring for and milking them.

Cow testing associations should be maintained in every dairy district of California, and we should like to see the dairymen of the State manifest more enthusiasm in regards to these co-operative organizations.

Two large creamery associations of the State have adopted a policy of placing dairy cows with farmers that is appealing strongly to new settlers in various communities where these companies are represented.

The plan is to furnish cows for a small cash payment on each animal, the balance to be paid out of the weekly cream check. Each cow is accompanied by her record for butter-fat production while she has been in possession of the creamery, and the price at which she is sold is determined by this record.

Upon a plan of this kind there is every chance for a man of limited means to get a start in the dairy business, and many newcomers to the State are taking advantage of the opportunities thus afforded.

In many Wisconsin communities the average production of dairy cows has been increased from 140 pounds of butter per cow per year to 250 pounds per cow, all because the dairymen were persuaded to give up their old methods and adopt business principles. An increase of one hundred pounds of butter a year is worth thinking about.

There is no denying the fact that the production of live stock is not keeping pace with the consumption thereof. California stockmen and farmers should anticipate the big market that there will be for meat animals of all kinds as a result of the many thousand people who will come here to attend the big exposition in 1915, not to mention the steady growth of population that will take place in the meantime.

During the year 1910 there were 8,500,000 calves slaughtered in the United States, and the scarcity of cattle is probably due more to their wholesale slaughter than to anything else.

Great Need for Purebred Stock in Irrigated Districts

(By W. H. Heilman, Government Irrigation Expert.)

The irrigated lands of the West, although irrigation is only in its beginning, have begun to contribute many hundreds of millions annually to the farmers' bank account.

While the practice of irrigation until quite recently was considered economically possible only for high-class products or crops with high market value per acre, such as fruits, we are learning very rapidly that it is entirely practicable and profitable to carry on general farming under irrigation, and that nearly all common crops can be made to pay very satisfactory returns each year, especially if grown in connection with live stock production.

Farming under irrigation is today representative of the highest type of husbandry. The control of water to the crop reacts with a twofold advantage in an arid country. Primarily, moisture or water assurance such as is possible through irrigation is a crop insurance, and the fact that there is little or no rainfall at the same time intimates almost constant sunshine. The combination of moisture and sunshine is one, the importance of which no tiller of the soil can overestimate, and also a nature help which the novice in farming must consider as of enormous value.

Aridity to the uninformed means desolation, dust, alkali, thirst and starvation. As a matter of fact our millions of acres of arid land are veritable storehouses of fertility and production, and with irrigation will feed the nation for generations to come. We can consider this area in a large way as nature's great conservatory to be drawn upon perpetually after we have become sufficiently intelligent in the matters of subjugation and use.

I find that the beginner in irrigation farming is quite generally successful. In fact, that success is quite uniformly possible. For a number of years I have been closely in touch with all classes of settlers in newly opened districts and I find that nearly always the beginner is ready with his water payments, and that at the same time his farm improvements are not slighted. I am inclined to believe that more failures are due to misfortune in the initial acquirement of undesirable pieces of land, or to being cheated in the first purchases of land and equipment than to mismanagement of the farming operations, once started.

Fortunately, at least on Government irrigation projects, the inexperienced man is given every help and consideration possible in matters relating to the selection of land and farm plans. Irrigated lands are attracting some of the brightest young men from older sections of the country, and these men of education and training in agriculture do not need much help. In fact, they are early ready to help others.

There have never been better opportunities for acquiring land in the West than are at present being offered in the irrigated districts. It is true that irrigated farming is high-class farming, and that capital and thrift are necessary for the early development of the home. The returns are, however, commensurate with the energies expended. Primary safeguards against failure rest in the se-

lection of the best soils in districts having an assured water supply and in localities contiguous to markets. As knowledge regarding the possibilities of production, the rapid increase in the value of the land, and the assurance of making a satisfactory home becomes general the occupancy of the land or settlement on the farm will be only a matter of time.

It is not all a matter of settlement or numerical increase on the land, however. The new country demands the introduction of new crops or products, the establishment of new enterprises and the bringing forth of conveniences and commodities which farming districts demand. Herein lies almost every inducement to the investor or the specialist. Take for example the Klamath country in Southern Oregon and Northern California which is rapidly coming under irrigation, and which is especially suited to general farming and live stock production. In this entire district comprising nearly half a million acres of land of all descriptions there is not a single established breeder of purebred livestock. The district is suited for dairying, yet there is not a breeder of dairy stock within about three hundred miles. The same is true for hogs, cattle and general live stock breeding. There is a demand and good markets for live stock products, yet every dairy animal, every purebred hog, every sire for breeding purposes must be shipped in, often from the Middle West or imported direct.

Not long since we practically scoured the entire states of Oregon and California for a carload of purebred dairy cows and had to give up the effort. Our farmers are actually clubbing together and sending representatives into the Middle West to purchase the right breeds of cattle for the establishment of industries which must be assured in order that the district may be started in the right direction. Our entire district was enthusiastic for the establishment of the creamery and the cheese factory, yet when we looked about we could not get the stock. To re-establish a general interest in an industry once having failed is difficult.

In the older parts of the country there are many breeders of live stock. Most of them have capital and are in fact seeking new fields. They seem to hesitate, however, to go into the far West for the establishment of branch breeding farms.

Another phase of the subject relates to the matter of finance. There is every opportunity for the man with capital to establish himself in a new district and supply the settler with needed live stock in instances where the individual has not the necessary capital for the acquirement of live stock to eat his products. Investments of this character are sure and safe. The returns enrich both the man with money and the farmer with the stock, who stands sponsor for the returns. The country is old enough in the farming business to permit the man with money to unite with the farmer for mutual advantage.

The above recites but one instance where an enterprise might be estab-

(Continued on page 11.)



THE DAIRY



Herd Testing and Grading

The following address was given at the twelfth annual convention of the California Creamery Operators' Association, San Luis Obispo, November 24, 1911, by Leroy Anderson.

By the end of another month the Ferndale Cow Testing Association will have completed two years of record for cows belonging to members of the association. In 1909 something over 2,000 cows were entered, but only 728 completed a full nine months' consecutive record. The summary gives the following yields of butter-fat:

No. cows.	Pounds butter-fat.
6 produced over.....	400
37 produced between.....	350 and 450
128 produced between.....	300 and 350
227 produced between.....	250 and 300
220 produced between.....	200 and 250
108 produced between.....	150 and 200
12 produced less than.....	150

I have recently been granted access to records of a few herds, and I trust I am not breaking any confidence if I tell you a little about them. Some individual records showing the wide variation in production will be of interest. The nine months' milking period covered by this test is approximately from April to December, 1909, inclusive. By the rules of the association I am not privileged to give names of cows or owners, and the numbers given are my own. To arrive at a value the butter-fat was figured at 33 cents a pound:

No.	Age.	Lbs. Milk.	Lbs. Fat.	Value of Fat.
1	2	3844	151.1	\$49.86
2	2	3878	163.3	53.89
3	2	3844	183.9	60.69
4	2	7266	282.9	93.36
5	3	5099	188.9	62.34
6	4	3817	140.9	46.30
7	4	7458	362.2	119.53
8	5	7849	322.8	106.52
9	6	4087	138.3	45.64
10	6	6345	234.5	77.39
11	6	9038	370.3	122.20
12	7	7136	308.5	101.81
13	9	7729	320.1	105.63
14	9	9050	350.6	115.70
15	9	7238	400.0	132.00

The following are two good twelve months' records, the value of fat being reckoned at 33 cents per pound:

No.	Age.	Lbs. Milk.	Lbs. Fat.	Value of Fat.
1	2	4897	267.8	\$88.37
2	6	14640	553.0	182.49

I am told that the Ferndale Association made a calculation of the annual cost of keeping a milk cow and found it to be approximately \$60. This sum includes rent of land (which may correspond to interest on investment), feed, labor and other charges that enter into such an estimate. On this basis only four of the cows listed above show a loss and two of those are 2-year-olds. Two other heifers are on the credit side by only a small margin. All the others turn a profit

of 30 to 120 per cent above cost of keeping. The records of the association show one herd of thirty-three cows, chiefly of Jersey and Holstein blood, to have produced in 1909 an average of 6,444 pounds of milk and 323 pounds of fat with an actual selling value of \$110.78, which is a little more than 33 cents a pound. I think this must be one of the best herds of its size in the State. If there are better ones I would like to hear of them.

Although profit in dollars and cents is what the dairyman is looking for, it is not the main point in this discussion. We are just now concerned rather with the method of finding upon which cow's back we may look for profit or loss. Each dairyman in the Ferndale district did not attempt to weigh and test the milk from each of his own cows. On the contrary he co-operated with neighbor dairymen in such a manner as to employ a man who should devote his whole time to testing the cows of the co-operating dairymen. One year's experience taught the members how some improvements may be made, and the contract into which they entered in 1911 represents the teaching of that experience. Believing it will be helpful to those who are endeavoring to form cow testing associations, I quote in full the form of contract signed by members of the Ferndale Association:

"Whereas, It is the desire of the undersigned dairymen of Humboldt County, Cal., to form an association, known as the Ferndale Cow Testing Association, for the purpose of testing the cows belonging to said dairymen; and,

"Whereas, It will be necessary that said association, when formed, draft by-laws, elect officers and directors, and hire a tester in order to do said testing; and,

"Whereas, In order to pay said tester it will be necessary that the following rates be paid by the members of said association, to-wit: For each member taking his own samples for testing, 80 cents per cow per year; all members having less than twenty cows tested must take their own samples. All members having fifty or more cows tested, who shall have samples taken by tester, shall pay 80 cents per cow per year. All members having less than fifty cows tested, who shall have samples taken by tester, shall pay \$1 per cow per year. The cows of each member are to be tested once each month for one year. The tester is to be hired and under the control of directors of said association, which directors shall have the management and control of its affairs, according to the judgment of the majority of members as expressed in the by-laws which may be adopted by said association.

"Now, Therefore, We, the undersigned, in consideration of the premises and of the mutual promises contained herein, do hereby agree with each other and with the several signers of any paper similar to this, and with said Ferndale Cow Testing Association, to pay to said Ferndale Cow Testing Association, quarterly in advance, the annual sums set opposite our respective names, said amount to be paid for one year's testing of the number of cows we hereby agree to have tested by said association, ac-

cording to the foregoing rates; and in case any member should increase the number of cows he has tested by said association he shall pay a proportionately higher amount per quarter in accordance with the foregoing schedule of rates. The first payment is to be made March 15, 1911, and the succeeding payments are to be made on the 15th days of June, September and December, 1911.

"We Further Agree: (1) That the money collected shall be applied to paying the running expenses of said association; that the said association shall keep full and accurate books of account of the receipts and disbursements, and of all business of said association, and of the resolutions and orders of the directors, and the same shall be the property of the association, and shall be open at all times to the examination of the members and to each of them.

"(2) Each member of said association, in addition to the foregoing rates, shall furnish board and lodging for the tester for at least one day at each visit, and if necessary convey him to his next place of work. Said tester shall not work on Sundays, but shall be entitled to board and lodging over Sunday at the place where he is working Saturday.

"(3) That we shall not be holden to pay the sum subscribed by us unless the aggregate of our subscriptions and contributions to this object shall by the (day of month and year) be equivalent to the assessments for 1,200 cows."

Following the above is the blank space left for the signers, which included the date, the signature, number



The Reception Committee of Pacific Guernsey Herd, Loleta, Cal.

PURCHASED THE DOYLE HERD

The Live Stock and Dairy Journal:

A piece of news that might be of interest is the fact that we have recently bought the entire herd of registered cows and heifers of W. J. Doyle of San Diego, Cal. It might be remembered by some that Mr. Doyle recently bought the pick of a large Wisconsin sale and shipped them to his ranch near San Diego, but now, owing to circumstances, has decided to sell his ranch, stock and all, and we, realizing an opportunity to buy such a choice lot of Holsteins near home, have just completed the deal to take over his stock, and have brought them to our ranch near Chino. Those familiar with Holstein breeding must agree that they are a herd of unusual quality. In the lot are to be found a cow with an advanced registry record of 23 pounds of butter in seven days, a cow with a 16.54-pound butter record in seven days, made as a junior 2-year-old, she also being the daughter of a 25-pound cow; a heifer with a record of 13 pounds of butter in seven days, made when less than 2 years old, and a cow with an unofficial record of 9190 pounds of milk and 413 pounds of butter in one year as a 2-year-old.

The heifers in the herd are mostly from advanced registry dams, and are grand-daughters of such famous sires as King Segis, the world's champion young sire and sire of more 20-pound 2-year-olds than any other sire of the breed; Pontiac Korndyke, sire of the only two 37-pound cows in the world and King of the Pontiacs, Homestead Junior De Kol, sire of Grace Fayne's 2d Homestead, 35.55, the famous world's champion cow. Also the sire of three other 30-pound daughters and Aggie Cornucopia Johanna Lad Junior, the greatest prize winning bull of the herd.

We are still undecided whether we will offer any of this elegant lot of cows and heifers for sale or not. Should we decide to sell our sole reason would be that we intend to go East next spring and bring out a carload or two of the finest animals of the Holstein breed to be found, irrespective of price, from one certain strain of the family, as we believe that only by breeding into one strain or family can one become a truly great breeder.

Sincerely,
McALLISTER & SON.
Chino, Cal.

GRADE HOLSTEIN COWS SOLD

Rhoades & Rhoades, auctioneers of Los Angeles, recently sold for the Bonnie Brae Dairy of Los Angeles 400 head of grade Holstein cows. The sale aggregated close to \$16,000, the top price for an individual being \$200. The following well-known dairymen and breeders attended the sale and were heavy buyers: Messrs. Burton, Cherry, Green, De Groot, Fredericks, Sorenson and Duncan. The Rhoades firm also officiated at a sale of 65 head of heavy draft horses and mules owned by Von Schulez & Son, at which the top price was \$600 for a span of mares. The Wreden sale of Holsteins at Compton attracted many buyers, as did the sale of Ed German's stock at Hynes on December 21st, when 35 Holsteins were sold at unusually good prices.

MORE HOLSTEINS
FOR CALIFORNIA

The Field Holstein Company writes as follows to the Holstein-Friesian Register:

"We are pleased to report among recent sales a son of Dutchland Sir Pontiac Rag Apple and a son of Dutchland Sir Pietertje Hengerveld to California breeders. Mr. James McGillivray of Sacramento secured the son of Dutchland Colantha Mona. This heifer milked nearly 500 pounds of milk as a junior 2-year-old in seven days, and this record was not made under favorable conditions. The second dam of this bull was Mona Pauline De Kol, one of our greatest cows, both as to individuality and transmitting qualities. Few cows have ever produced four equally as good daughters, one with a record of over 30, one with 27 and two large producing heifers. We believe that Mr. McGillivray is to be congratulated upon his selection of a bull of this quality, as he has not only selected him from a producing dam but by a sire carrying 100 per cent of the blood of the cow that broke the world's record last winter, and that is making a world's record of butter production in the semi-official work. F. & H. Stenzel, San Lorenzo, secured one of the twin bulls sired by Dutchland Sir Pietertje Hengerveld from Dutchland Creamelle, one of our most promising heifers. She made 17 pounds as a 2-year-old and 22.43 as a 3-year-old, averaging 3.9 per cent fat, this record being made after having twin calves. We think she is a very likely prospect for a 30-pound record when she again freshens. Her dam, Creamelle Vale, is now in test and we have every reason to believe that she will increase her former record of 704 pounds of milk in seven days and 104 pounds in one day, and are in hopes that in her semi-official work she will do equally as well as her dam, De Kol Creamelle, who gave over 26,000 pounds of milk in one year, and 10,017 pounds in 100 days. These are large milk records."

A PROMISING YOUNG BULL.

The Journal has received from F. & H. Stenzel of San Lorenzo the pedigree of the young Holstein bull they recently brought out from New York, and of which mention is made in another item in this issue. The pedigree shows that the youngster is backed by a combination of breeding that would be extremely difficult to improve upon. His sire, Dutchland Sir Pietertje Hengerveld, is a son of Pietertje Hengerveld's Count De Kol and the wonderful cow, Changeling. His dam, a 22-pound 3-year-old, is by Pontiac Butter Boy and from a 27-pound daughter of Paul De Kol, Jr., and De Kol Creamelle, a 28-pound daughter of Pietertje Hengerveld's Count De Kol. The records of the seven nearest dams of this promising young bull, a sister of his dam and five sisters of his sire average, for the thirteen, 29.05 pounds each. Messrs. Stenzel inform us that they have just received from New York thirty head of Holstein helpers, all registered stock, among them being grand-daughters of King Segis and King of the Pontiacs. Of these we will hear later, as Messrs. Stenzel promises us a list of them as soon as all the transfers are received.

COMPLETED THE COURSE.

Among the twenty-five young men who recently completed the course in dairy manufactures at the University Farm at Davis there is fine material for California creameries in need of first-class butter-makers, helpers or testers. A good many have had creamery experience of some years, and are capable of assuming all the responsibilities of a butter-maker, while others less experienced are prepared to take positions as second men or helpers. A number have expressed a preference for a position as assistant butter-maker in order that they may gain more experience before attempting to run a plant. The securing of creamery help—good creamery help—is often quite a problem, and the attention of creamery managers is called to these men who are sufficiently interested in progressive creamery work to leave former positions and spend two months at the dairy school. Instruction given has covered practically all of the phases of creamery practice—testing, butter-making, cheese-making, creamery bookkeeping, refrigeration, engines, pumps, etc.—and with this foundation they are well equipped for satisfactorily performing the duties of a creamery man. Keep the dairy boys in mind. They may be located by addressing Dairy Industry, University Farm, Davis, Cal.

OAK GROVE DAIRY FARM.

Over in rich Yolo County another young breeder is laying the foundation for a first-class stock farm. Two years ago the young man in question, Mr. H. G. Armstrong, took charge of the 107 acres which he named Oak Grove Dairy Farm, and started operations with one cow. He afterward purchased a dairy herd of mixed blood and after several months of hard work discovered that something was wrong with the profit producing capacity of his herd, and he immediately set about correcting that condition by subjugating each cow's milk to a regular test for butter-fat. In this way the "boarders" were discovered and promptly sent to the butcher, their places being filled with high grade Holsteins.

Although Oak Grove Dairy is now a profitable one Mr. Armstrong keeps up his testing and through it not only keeps the losers weeded out, but also keeps an accurate record of the value of various feeds.

The feature of Oak Grove Dairy Farm which is claiming the most of Mr. Armstrong's thought and care at the present time is the swine herd. He has gathered together a herd of purebred Berkshires of excellent blood line, and containing individuals of known quality. In a later issue we will show photographs of some of the herd. The Oak Grove Dairy Farm advertisement in this issue gives a good idea of the makeup of the herd.

KILLING OFF LAND SHARKS.

Selling farms by mail is an industry noticeably on the decline in Chicago. Various exposures of the facts behind glowing magazine advertisements have served usefully, aided by the investigations by postoffice inspectors. Both have alarmed the advertising speculators who promised little earthly paradises for "seventeen cents a day" or a similarly easy sum.

A FIFTEEN-ACRE FARM.

The Live Stock and Dairy Journal:

I am a beginner and would like to know if fifteen acres would be big enough to run a small dairy and a few hogs, and what would be the best way to manage them, as I imagine there would not be much room for pasture. I would like to raise all of my feed. Please inform me in your next issue.

—U. R. U., Hanford, Cal.

The above query was submitted to several practical dairymen, each one in a different section of the State, in order to give the inquirer information that would apply under various conditions. Only one answer has been received up to this writing, but other answers will be published in our next issue. Any of our readers who have advice to offer as how best to manage a small farm are invited to write us a letter for publication, as a general discussion along these lines would be of interest and value to many of our readers. The answer referred to is here given:

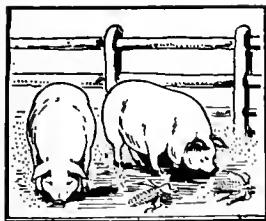
The Live Stock and Dairy Journal:

As you do not tell me where this man will try to farm I am forced to presume that he is going to farm here on the irrigated lands of the Kern River delta, where good land is as good as any under the sun. Now for a fifteen-acre dairy ranch, I would say put eight acres in alfalfa. Level the land carefully and seed it well, and do not pasture it. It should yield at least six tons of hay per acre per season, as we make five cuttings here. This would give him about fifty tons of good alfalfa hay. As a cow will eat about four tons of hay in a year, depending on the breed and the amount of this feed used, I should say he should begin with eight cows, assuming that he will keep a good bull and raise his heifer calves. He will always have plenty of hay. Now he should put five acres into grain at this time, or even earlier if possible—either barley, wheat or oats—for hay. This will give two to four tons of grain hay per acre, which will feed his horses. When he cuts the hay crop off he can irrigate the five acres and after plowing plant about four acres (or even less, if found sufficient to supply enough silage for the cows) to Indian corn and the balance to a variety of corn to make grain, so that he can grind it up and have some grain for his cows and horses. Grind it, corn and cob, and that makes good feed. We have one variety of silage corn that will make twenty tons of silage to the acre, and as seven tons of silage is ample for one cow, he can soon learn about how much to plant for that use. Now he should have one acre for his house, orchard, berry patch and garden, and the other acre for buildings and corrals. He should build an 80-ton silo, not to exceed 12 feet inside diameter. It would be better if were made 10 feet inside and 40 feet high, as eight or ten cows will not consume as much as should be taken out each day. A 12-foot silo 32 feet high holds 74 tons; a 10-foot silo 40 feet high holds 70 tons.

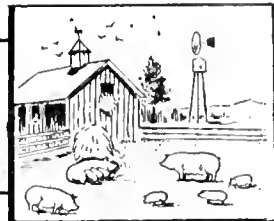
I might write on this subject for hours and still have plenty to tell, but will say that this might give him some idea of what to expect.

J. G. STAHL.

Kern County, Cal.



THE SWINE HERD



SOME SUGGESTIONS FOR THE CARE OF PIGS

The Live Stock and Dairy Journal: Since taking up swine raising as a part of my farming operations I have carefully read all the matter obtainable on swine subjects, and have followed out many of the ideas gained in this way, not always as they are written, but applying the suggestions in the best way possible under conditions existing on my own farm. I have found that the best advice is that given by other hog raisers who write and tell their experiences through the farm papers, and I think if us farmers would make it more of a practice to tell the little points we have learned we could help each other a whole lot.

I have always followed one principle pretty closely, and that is that the maintaining of health in a herd is just as important as the feeding proposition, or even more so, for unhealthy hogs cannot make satisfactory gains with the best of feed.

The feeding of hogs depends largely upon what a person has available, and is a problem that must be worked out by a hog raiser according to local conditions. But what I want to suggest are a few essential points regarding the general care and health of swine.

In the first place, shelter is a very important thing during the fall and winter months, even in this mild climate of our interior valleys of California. Cold winds, rains and drafts are bad for hogs, and it is not necessary to build expensive houses to give protection from these things. Low, stuffy sheds must be avoided, for they shut out both light and ventilation. Good, clean straw should always be kept on the sleeping floor, rather than dust, which often gets in the nostrils of pigs and then into their lungs and causes trouble.

Exercise is necessary, and if possible hogs should have access to a large yard all the time. I notice that some farmers are inclined to keep their hogs shut up too closely during the rainy weather, not taking time during the intervals between storms to let them out in the lot. Many farmers think it too much trouble to bother about such small matters, but I tell you that in many instances it is attention to just such small things as these that determines success or failure. I notice that hogs that follow cattle are most always thrifty because they get lots of exercise looking for food.

Quite often lice are responsible for unthriftiness in hogs, and for these I have always found crude oil a good remedy. I get a barrel of this at a time because it is much cheaper in a large quantity, and then I take an old broom whenever there is the least sign of lice or mites and give each hog a good coating. Takes a little time, to be sure, but it is another of those little details that must be looked after.

Often young pigs are stunted because of worms. I had a bad case of

worms in my herd when I first started. Being new at the business I couldn't make out why my pigs didn't get along better with the good feed and care they were getting. I wanted to satisfy myself, so called a veterinarian, and he applied a standard treatment, with the result that in a few weeks you would not have known they were the same pigs.

I always keep two self-feeders in my hog lots. One of them contains charcoal, with which is mixed some salt, about half a pailful to every hundred pounds of charcoal. In the other I keep a mixture of wood ashes, salt, air-slaked lime and sulphur. I use one-third ashes, one-third salt and one-third lime, and to every twenty pounds of this mixture I add one-half pound of sulphur. The hogs eat a great deal more of the charcoal than they do of the mixture. I think this mineral matter is great stuff for swine, and if any of the readers of the Journal can suggest anything that they think is better than the above I would like to know about it. S. DUNCAN.

Butte County, Cal.

FEEDING ORPHAN PIGS.

The Live Stock and Dairy Journal: I want to tell you of a plan I have followed for feeding little pigs just farrowed. It often occurs that these are deprived of milk from their mother, sometimes because of her death and other times because she has no milk to give them. Many farmers will take a deep pan and fill it with cow's milk and then expect the little pigs to drink out of it, but they always choke up on account of not being able to get their breath. I take a shallow tin plate, such as a pie pan, which is found in every kitchen, and pour fresh cow's milk in it to the depth of half an inch. The little pigs poke their noses against the bottom of the pan and suck up the milk, and they are not the least bit distressed. In this way they will stay with it until they get all they want, but in a deep pan they are apt to give up because of the difficulty they have in drinking. M. WALDRON.

Humboldt County.

RUBBING POST FOR SWINE.

The Live Stock and Dairy Journal: I read in an Eastern paper an item suggesting a simple rubbing post for swine, and I have since tried the scheme with very satisfactory results. Drive a good, strong stake where the hogs have free access to it. Wrap the stake with an old sack, around which wind wire enough to hold it in place. The sack should extend a couple of inches above the top of the stake. Keep the sack well saturated with crude oil. It gives the hogs a lot of relief and is an easy solution of the louse question. Try the scheme for yourself and see how well it works. T. M. FRANCIS.

Tulare County, Cal.

FAVORS LARGE TYPE POLAND CHINAS

The Live Stock and Dairy Journal: I have been much interested in the letters I read in your paper from my fellow breeders. Perhaps a plea for the large type Poland Chinas may be interesting to some. I used to breed the medium type, and for a good many years thought they were the most profitable hog to raise. A few years ago I determined to try the large type. I am now breeding both types, but believe the large type Poland China hog, when properly selected and mated, the best. At 1 year old the large type is about a foot longer than the medium type and proportionately large all over.

I have sold since Fair time about \$600 worth of Poland China swine, and have several more inquiries at hand. I am laying my plans to meet my fellow breeders at the State Fair next year, where I hope to have some specimens of my large type, and also of the medium type hogs. H's Big Bone, my grand champion boar at the Stockton Fair, is doing well, and I hope to show him next Fair time at near 1000 pounds. I bought him of Peter Mouw, the pioneer of the large type Poland China breeders. This boar is the greatest getter of good sows I ever saw. His boar pigs are also scattered all over the State, and have always been satisfactory. A particularly nice one was shipped this fall to the Calaveras County hospital at San Andreas; another to John Grupe, Linden; two others to the Perkins Brothers' Company, Santa Ana; six of his sow pigs to the Hawaiian territory and others requiring too much space to mention. I now am weaning thirty-eight of his pigs that are going to please somebody.

Yours for good breeding,

A. M. HENRY.

San Joaquin County.

PROSPERITY FOR HOG RAISERS

In view of the general situation as regards cattle and sheep, it seems clear that the swine industry is in for one of the most prosperous years in its history, says the Berkshire World. Farmers will increase their holdings of hogs. Thousands of them will buy pedigree herd boars. More time and thought will be devoted to the whole business. In these circumstances definite progress in the improvement of market types and the average merit of registered herds should be made. We confidently expect this to occur. We think the signs of the time are decidedly encouraging to the breeders and feeders of hogs.

As experience increases it becomes more and more evident to farmers everywhere that the hog is the most dependable source of profit that can be produced on the farm. Hogs fit into almost every system of farming.

SWINELAND

Berkshires

Are rich in the best blood lines of the breed.

We are sold out of fall pigs, and are now booking orders for spring delivery. Send Yours Now.

SWINELAND

Duroc Jerseys

Strong, hardy, big boned and early maturing. The best of the lard type.

A few exceptionally fine fall Boar Pigs for immediate delivery. These pigs are good enough to head any herd. August and September farrow, now weighing from 90 to 125 pounds.

Prices, \$20.00 to \$25.00 each.

SWINELAND

Tamworths

The best bacon hog in America. Good rangers, strong and hardy. The sows are very prolific, farrowing from ten to fifteen pigs to the litter and the pigs will make 175 to 200 pounds in six months.

Prices, sow pigs, \$15.00. Boar pigs, \$20.00 each.

SWINELAND

Stock is bred right, fed right and raised right. Only the choice pigs of the litters are sold for breeding purposes. Every pig leaving Swineland is guaranteed, and the buyer can have his money back for the asking if he isn't fully satisfied. All stock priced f. o. b. Yuba City and registered. Reference: This paper or any bank in Marysville.

SWINELAND

Box 161.

Yuba City, Cal.

O. I. C.

THE BIG WHITE HOG.

Two hundred and fifty to 300 pounds at 8 months. Best and largest herd in the State.

Write us your wants. We can fill them. All our stock is registered.

STUDARUS & CUNNINGHAM
MILLS, CAL.

RED DUROC HOGS

Best Bred Stock Now in California

YOUNG STOCK AND SERVICE BOARS AND SOWS FOR SALE

All registered pure-breds, and from such sires as Wouder and Klondike. New Importations from Missouri and Indiana. We are located in the Imperial Valley, and are here to supply California, Oregon and Arizona breeders. Write for prices and pedigrees to

MOORE BROS.,
Box 202, El Centro, Imperial Co., Cal.



THE HORSE



AFFAIRS OF THE PERCHERON SOCIETY OF AMERICA

Our attention has been called to a report recently made by the Pedigree Committee of the Percheron Society of America to the Directors thereof, giving the results of an investigation concerning charges of fraud in the registration of Percheron horses. These charges have been freely made for some months past and given wide circulation, thereby tending to create a feeling of distrust among the farmers of the country who are not in a position to know the real facts of the matter. The report shows that the parties making the charges have been guilty of gross misrepresentation in several instances, from which it would appear that their campaign to discredit the officers of the society are not founded on truth and facts. Those who have made impartial investigation declare that the present management of the society is the best it has ever had, and that every possible precaution is taken to guard against fraud in registration. It is often possible for a dishonest breeder to make false entries that cannot be detected by the Secretary.

Extracts from the report of the committee follow:

"For the past seven months, systematic attacks have been made on the Percheron Society of America and its officers. These attacks have been made public through certain papers, edited by parties who are avowedly hostile to the policies of the Percheron Society of America.

"Your Pedigree Committee, in the discharge of its duty, under the by-laws of the society, has made a thorough investigation of these attacks and the reasons for the same. The results of the investigation of your committee show that the attacks or charges made are either based upon typographical errors and technical mistakes, or are false and untrue.

"The investigations made by your committee also show that the parties responsible for these attacks do not have the welfare of the Percheron Society and the breeders of America at heart, but that the underlying motive is the desire to gain control of the management of the Percheron Society of America. The men responsible for the attacks are G. W. Patterson, William Danforth, G. L. Carlson and F. B. Graham, and the avowed purpose of these men is to break down and destroy the present Percheron organization.

"The investigation made by your committee shows that it is the purpose of these men to continue the attacks they are now making, until they succeed in entirely overthrowing the present organization of the Percheron Society of America. The public attacks so far have been largely confined to the President and members of the Pedigree Committee, but the attacking parties have stated repeatedly that

they propose to overthrow the entire management for wrongs they allege said management have permitted to exist; and have stated that every member of the Board of Directors is equally to blame with the President and members of the Pedigree Committee.

"Your committee would respectfully call attention to the fact that all members of the Percheron Society who are familiar with the history of our organization well understand that the officers and Board of Directors have had many serious difficulties to contend with and overcome during the past few years, on account of rival organizations that have existed heretofore. Because of the previous existence of various stud books, and the long period of depression in the horse business, during which there were no published records either in France or America, it has been most difficult to harmonize these various records since their union and consolidation with the Percheron Society of America.

"In some cases pedigrees were issued years ago, and while the official records clearly show their issuance they were not published because of the expense of such publication and the belief of the authorities in charge at that time that said publication was not essential.

"It is also known that in a number of cases in the records that we fell heir to we found errors and mistakes of various kinds.

"These things are well understood by our older members and mention of same is made here only because of the fact that some of our new members are not familiar with the matters above set forth.

"Your committee would also call attention to the fact that the Board of Directors, after the most careful consideration and after making a thorough examination of all the original records, applications and other data that could be obtained, reached the conclusion that in most cases these pedigrees were genuine and issued in good faith, having the signature of the proper officers and the seal of the society, in all cases were it was possible to obtain the original certificates.

"The board deemed it wise and, in fact, absolutely necessary that all of these original records should be confirmed and left undisturbed; and after the bearing at Washington a year ago last June, the Department of Agriculture accepted the recommendations made by this society, and soon thereafter the only other society of recognized standing, competing with the Percheron Society of America, joined hands with our society and for the first time in the recent history of Percheron registrations, we have a united and practically unanimous body of Percheron breeders in the United States.

"Your committee would also call attention to the fact that for the past three years or more we have had as rigid registration rules as any breed

society in the United States.

"The Secretary and the members of this committee have been most thorough in their investigations on all doubtful applications in order that the records of the Percheron Society of America might be free from doubtful registrations. We have had faith that the policy that has been pursued by the present management was approved and believed in by a very large majority of the members of the society.

"As evidence that the breeders of the country believe in this association we cite the fact that since our last annual meeting more than 1150 breeders have become members of the Percheron Society of America, bringing our total membership to more than 4000 individual breeders, who are actively engaged in breeding and distributing America's greatest draft horse.

"It is, therefore, to be regretted that a very few jealous and dissatisfied members, in an attempt to gain some personal advantages, should endeavor to destroy and break down what has been built up during the past nine years by the Percheron Society.

"The evident purpose of this attack is not only to discredit the officers and Pedigree Committee of this society, but also to discredit the records and pedigrees that the breeders of this country have relied upon in the past and must necessarily rely upon in their breeding operations in the future.

"It would be impracticable for this committee, in the space of this report, to go over in detail all of the various charges that have been made, and to enter into detailed explanations of the various matters that attention is called to in the records of the society.

"Your committee must again emphasize the fact that the long years of depression following 1892 had left the horse breeding industry in very bad shape; that thousands of purebred animals had been left unrecorded because values were so low and demand so slight that it did not pay to record them; and that hundreds of our farmer breeders were so hard up, when conditions did change for the better, that they at first recorded their animals only as they had sale for them, and that as a consequence many animals were not recorded until after some younger animals from the same dam had been recorded. It also resulted in some cases that old mares which had been left unrecorded for many years were recorded with all their direct progeny and descendants at practically one time.

"These conditions were recognized by our stockholders and by all breeders, and the rules in force, for the first few years after the organization of the Percheron Society were liberal, to permit the farmers and breeders of America, who had this unrecorded stock, to have the same properly recorded. All registrations were made under these rules and in accordance

therewith; and your committee believe that the rules were wise, were just and were for the best interests of the horse breeding industry in America. It is the judgment of your committee that the attacks upon our stud books are, when fully analyzed, attacks upon the policies pursued by the Percheron Society of America since its organization; and that any other man as President would have been subject to the same bitter attacks which are now being centered on President McMillan.

"The members of the Board of Directors, and our members may draw their own conclusion as to Mr. Patterson's reasons for charging Mr. McMillan and members of this committee with fraud. Inasmuch as the other members of the board may not realize how persistently and steadily the Pedigree Committee has worked, attention is respectfully called to the fact that, during the last two years no less than twenty meetings of the committee have been held, over three hundred doubtful applications rejected and four extended field investigations made. As a result of our work one firm has been debarred from recording any American bred stock and restrictions laid upon its other business. Another firm detected in attempting irregularities has been fined \$200 and placed under strict restrictions on all future business, said restrictions requiring the firm in question to report all future colts before 4 months' old (before they are weaned) and to pay the expenses of having same inspected at side of dam, by an authorized representative of the society. Still another case, where the evidence indicated to the committee that a certain party's statements were unworthy of credence, was handled in the same way. Every specific case on which charges have been filed has been given proper attention.

"Not a single charge has ever been filed against any of the present members of the board, and since the publication of these statements Messrs. Patterson, Graham, Danforth and Carlson have all been called upon for specific charges, backed by proper evidence by investigators employed by the Pedigree Committee, and all have refused or been unable to submit a single specific case.

"In conclusion your Pedigree Committee would respectfully call attention to the following facts:

"The present management of this society has believed and still believes in the policy of building up, rather than tearing down. For several years past we have been providing additional rules governing the registration of animals with a view of placing every safeguard possible around the registration of animals and the issuance of pedigrees.

"We now require that animals be recorded at a young age, we require transfers of mares and in many other ways is every effort possible made

A. L. RUBY, Portland, Ore.

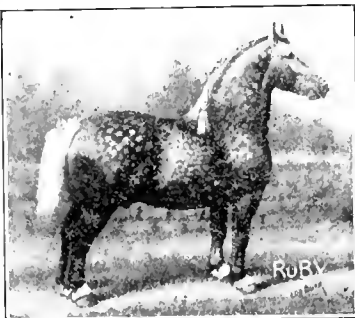
C. W. BOWERS, San Francisco

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The Largest Horse Importers on the Pacific Coast

Percheron, Belgian, English Shire, Hackneys and Coach Stallions and Mares.

We sell more imported horses than any other two firms on the coast because we are direct importers and give a four-year guarantee which is good right at home. We have on hand at all times the largest and best lot of heavy draft stallions and mares, both American bred and imported, to be found any place in the West. If you are in the market for a high-class stallion or mare, don't fail to give us a call, as we can sell you more genuine horse for the money than any other importer in the business.



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Address: RUBY & BOWERS, Hotel Cadillac, San Francisco, Cal.

50 Head Percheron and Belgian STALLIONS AND MARES

We have the best stallions and mares in California. Imported and home bred stallions weighing from 1800 to 2200 lbs. Prize winners in Europe and America. This stock is of royal breeding, every animal personally selected by the seller, Frank S. West.

We will sell you a first class imported stallion for \$1,000.00; imported mares in foal for \$500.00. We buy, sell and import more stallions and mares than any other firm in America. We don't want the world and that fenced in for profit on one animal. We make small profits and quick sales. We will show you horses that you will wish to buy, or pay your fare and expenses. West pays freight on horses, and buyer's fare. If you are interested, write us today, whether you wish to buy or not.

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Hamilton City, California

and

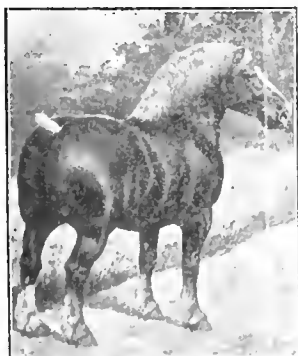
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Lafayette Stock Farm

J. CROUCH & SONS., Props.

LAFAYETTE, INDIANA



You can always get business with a good stallion, and you will be satisfied with our horses and prices.

We have a new importation of good, big-boned, heavy horses, including Percherons, Belgians and Shires. They can be seen at our permanent stables at the State Fair Grounds, Sacramento, Cal.

J. F. CAMPBELL

Manager

Phone Park 31. Sacramento, Cal.

to verify applications before pedigrees are issued.

"This society is composed of over four thousand stockholders, who are farmers and breeders throughout the United States and Canada. The records of the society belong to these stockholders and they are the men who are interested in maintaining them. It is for that reason that your committee has deemed it wise to place these facts so fully before the stockholders in order that they may have full opportunity to know the truth and act intelligently at the next annual meeting and future meetings that they attend."

A CORRECTION.

In the December issue of The Live Stock and Dairy Journal, in a reply by Professor Thompson to a query regarding the feeding of work horses, the following statement was made:

"Where a horse is allowed all the grain he will eat, he may be able to keep in condition, but it requires far too much hay to do this."

The sentence should have read as follows, the misstatement being due to a typographical error:

"Where a horse is allowed all the 'grain hay' he will eat, he may be able to keep in condition, etc."

A Review of the Live Stock Situation

(Continued from page 3.)

stock production in this country, which will be followed by much higher prices to the consumer. Foreign nations can supply only a small part of the meats we need; that small part will be sufficient to affect conditions here, and start another era of unprofitable prices, lessen production and cause ultimately higher prices on account of the shortage. At present stockmen generally are getting fair returns, and if substantially the present basis of prices continues there will be plenty of meat food products produced for home consumption as well as a goodly share for export.

"There is another very important reason contributing to the decreased production of live stock in the West, namely, the very unsatisfactory range conditions. A few years ago the Federal Government compelled stockmen to tear down fences on Government land. This prevented them from keeping a proper supervision over their herds; there was no incentive to breed better stock nor to conserve the range so as to keep it in its highest productive capacity. The natural result has been that the range is depleted by overstocking, and its carrying capacity has been reduced. There is only one logical solution for this vexatious problem, and that is a lease law. The proper conservation of the range and the maximum utilization of its grasses is a question which ought to interest every citizen in this nation. If, under proper regulation and control, the ranges can produce more live stock than at present, it is surely better for everyone concerned, and Congress should take heed of our urgent request for remedial legislation.

"The grazing of live stock on the national forests has proven very beneficial to the stockmen, and I am confident that a similar regulation of the open range will prove of lasting benefit to the country at large, as well as to the stockmen who may use the range."

MINNEWAWA STOCK FARM

Four Registered Percherons

Stallion and three mares. Not akin. Colts from all shown. Price for the bunch, \$4,000.

M. E. Sherman,

Fresno, Cal.

MULES AND HORSES FOR RENT

With Harness in Carload Lots by the month.

PALMER, McBRYDE & QUAYLE, Hooker & Lent Building,

San Francisco, Cal.

YOUNG JACKS!

California raised, of the biggest, heaviest-honed stock. Every Jack fully guaranteed. Come and see the stock. I show the mules.

JAS. W. McCORD,

Hanford, Cal.

Do you want large 16-hand, 1200 lb.

Jacks?

We have them.

MONTEREY MULE CO.

SOLEDAD,

MONTEREY COUNTY, CALIFORNIA

J. T. Ragsdale

MERCED, CAL.



Won 6 ribbons with 7 entries of five gaited saddle horses at the State Fair. If you want a good saddle horse, write me or see my stock at Merced.

J. T. RAGSDALE

MERCED

CALIFORNIA



J. L. MCCARTHY
LIVE STOCK AND REAL ESTATE AUCTIONER

Fifteen years experience at Chicago, S. Louis and Kansas City Stock Yards. Country sales a specialty. Address

Key Route Hotel
Oakland, Cal.

SPLENDID RESULTS IN COLT FEEDING

An Oregon farmer writes to the Breeder's Gazette regarding results in feeding a colt as follows:

"My colt was foaled June 3d and weighed 140 pounds as soon as wiped dry; at 39 days he weighed 340 pounds; at three months, 530 pounds; at four months, 660 pounds; at five months, 810 pounds. Until two months old he ran with his dam on good pasture, with no supplementary feed for dam or colt. On account of flies and not having access to the best of water, the mare and colt were taken up and run in a box stall, with access to a large corral. They were fed all the good alfalfa hay they would eat, and the mare was given two quarts bran and two quarts of speltz chop twice a day. The foal learned to eat with her. During his third month he learned to drink separator milk warm and fresh from the separator, drinking about a gallon at a feed. Seeing that he was getting a little too fat, at four months he was not allowed to eat grain with his dam, but was fed two quarts of bran and the milk ration increased to two gallons at a feed. Since then he has put on a gain of five pounds every day, and is now drinking two and a half gallons of separator milk. His dam is a good milker and he will be allowed to run with her until he is six months old at least. I have now splendid alfalfa pasture, and the mare and foal run on it days and are in the barn at night.

"Can this system of feeding be improved? Has there ever been as good a gain for the fourth month reported to the Gazette? My foal is a Shire. His dam weighs now in only fair condition 1742 pounds. The sire is said to have weighed 2000 pounds at 3 years of age."

FEEDING EGGS TO COLTS.

There is an European custom of imparting special growth and vigor to the young stallion colts at the imperial studs which they intend to keep for breeding purposes by giving them, in addition to oatmeal gruel with milk and sugar, even while they are nursing, freshly laid clean eggs.

It seems they start by breaking the contents of an egg on the colt's tongue and forcing him to swallow it, beginning with four eggs a day, later six and even up to a dozen.

When the colt is three or four weeks old they simply tap the shell until it is cracked into minute squares and make him take it shell and all. It is said the thoroughly cracked shell of freshly laid eggs causes the lime in the shell to dissolve and results in improved digestion, prevents digestive derangements and constipation, and builds up bone.

In discussing the matter a well-known breeder recently said:

"It stands to reason that if this custom is successful in Europe, and is even practiced by some of the greatest Shorthorn cattle exhibitors who aim at raising \$5,000 to \$10,000 show bulls by giving them a start over others by a liberal egg diet, it would seem eminently proper with a trotting colt when so much depends on crowding him ahead as much as possible of other competitors for extreme early developed colt speed and futurity honors."

THE STALLION LAW.

The Live Stock and Dairy Journal: Will you kindly give me information regarding the stallion law, as I am a newcomer to California.—T. M., Willows.

The stallion law is now in force, and all stallions standing for public service must be licensed with the California Stallion Board on or before January 1, 1912. All delinquents will be liable to prosecution after that date, and, upon conviction, fined \$100. Send for blanks and full information to Secretary Teiffer, State Board of Agriculture, Agricultural Park, Sacramento, Cal.

THE GOOD OLD COUNTY FAIR

When but a small boy, deep down in my heart, there was a yearning for the time of the good old county fair. I can recall the weeks of anticipation which marked the annual approach of the great event, an epochal period from which time was reckoned, such and such a thing having occurred before or after the fair. While age has somewhat dulled the keen edges of some of the anticipations, there is still a feeling of pleasure longing about the time the fairs begin. Agricultural fairs are old institutions, and looking back at the fair season just closed at Phoenix (and having attended four) I saw the same old fairs I remember as a boy, but there is a general air of modernity and prosperity in the surroundings, and they draw bigger crowds from year to year (when the management is right).

There are three classes who attend fairs. First, those who go to see what is there, look here and there and see nothing of great interest. Second, those who go to see the races and side shows and have a general good time. Third, those who take the opportunity which fairs offer to see and study live stock improvements, farm products and the latest and best in farm and dairy machinery, and find the fairs the greatest, most useful, practical and effective educational institutions.

What a pleasure it must be to go to a State Fair, like Mr. M. Bassett did with his Poland Chinas, and get every first prize, ten in number. Reminds me when Mr. Uihlein refused \$75,000 for his horse, The Harvester, last year. When asked why he refused such a large figure he stated that any one can own \$75,000, but only one man can own The Harvester.

Where, except at the county fair, can you find such another spectacle and happy abandonment as Uncle John and dear old Aunt Susan holding a fried chicken levee under the trees, attended by many grandchildren, kin and neighbors! Notice the farm boy and his best girl openly making love to one another, everybody laughing and talking and reeking with merriment and good feeling. Grand opera, theaters and firemen's tournaments are all right in their way, but as compared with the old-fashioned county fair as a means of general entertainment and as an incentive to real, natural, unalloyed joy, all stand tame and unprofitable. Some time when you have exhausted other means of entertainment, go back to the county fair, throw care aside and enter into the spirit which dominates such gatherings—it will make you young again.

WILLIAM G. LUTZ.

Kern County, California.

That Carload of JACKS JACKS JACKS Will Are Will GO GOING GONE Soon Be

Better talk it over with your neighbors and club together and buy one while you can. It is an opportunity you have never had before—Registered and Pedigreed Jacks. Don't put it off until the season opens, and you need the Jack, for you may not be able to get what you want then.

Remember the new law passed this year—No Jack or Stallion can make season in this State which is not registered, and these are the only Jacks in the State registered on breeding; registration on measurements amounts to nothing

Better get one of these Jacks now and be ready; it means money to you and lots of it. I have about half a load left, and they are all good ones. Without an exception every man who has looked at them has pronounced them the best lot they have ever seen. Come look them over. Don't delay.

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Our Percheron and French Coach Stallions showed for twelve prizes at the recent California State Fair, winning eight prizes, while all our competitors combined won but four.

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SHEEP



NATIONAL FORESTS AND THE SHEEP INDUSTRY

From a paper read before the California Wool Growers' Association, San Francisco, November 27, 1911, by John H. Hatton, Assistant District Forester, District 5, in charge of grazing.

"In 1910 there were 35,000,000 sheep in the Rocky Mountain and Pacific Coast states. Of these, exclusive of lambs, between seven and a half and eight millions grazed upon the national forests—approximately 22 per cent.

"In California that same year there were 2,200,000 sheep, 383,000 of which, not including lambs, were grazed upon the national forests under paid permits—nearly 17½ per cent. On private lands within the exterior boundaries of the California National Forests were grazed that year about 127,000 sheep, making a total of approximately 510,000 under national forest regulations. In keeping with my subject I have purposely confined these statistics to the so-called national forest states.

"But comparative statistics do not always express proportionate values. That 22 per cent only of all the sheep in the Rocky Mountain and Pacific Coast states, and that 17½ per cent of the sheep in California use national forest ranges do not mean that the sheep industry of these states is only 22 per cent or 17½ per cent dependent upon our mountain forage. Summer ranges or succulent feed are as essential to the sheep and lamb industries as water to the parched fields. The national forests now control in considerable measure the summer sheep ranges of the West, and just to that extent is our sheep industry dependent upon them. And to that extent will the sheep industry of the West continue to look to our mountain ranges until perhaps modified, like many other phases of agriculture are being modified by more intensive and scientific systems of management, or by changes in economic conditions.

"What have been the history of sheep grazing within the national forests and some of the factors influencing it?

"Our first start toward the control of grazing in the national forests in this country was made when Congress

passed the act of June 4, 1897, authorizing the Secretary of the Interior to make rules and regulations concerning the use and protection of national forests, then called 'Forest Reserves.' This authority conferred upon the Secretary of the Interior was, by the act of February 1, 1905, transferred to the Secretary of Agriculture, who now has the power to regulate grazing, as well as all other uses of the national forests. These first rules, however, were very restrictive and in many ways unjust. No doubt they were adapted largely from what public officials knew of the grazing policy of European countries, and were not adapted, as they now are, to meet, as far as may be consistent, the needs of the live stock interests. Sheep grazing was allowed, for instance, only in states with heavy rainfall, like Washington and Oregon. But as extensive mountain areas were withdrawn for national forest purposes in other states, including vast areas of summer pasture, these close restrictions were removed. To have continued them would have meant that the sheep business of this country would have been seriously crippled. I doubt very much whether the national forests could have survived such a restrictive policy for any great length of time.

"Naturally the first efforts in grazing control were imperfect and created some opposition. A part of this opposition was, no doubt, justified, but much of it was prompted by a fear on the part of stockmen that grazing control was not going to work well in practice, as much as it was by the actual application of the regulations themselves. It was quite natural that there should be opposition, and that that opposition, in some instances, should extend to the present time, especially among disappointed users. The people of the West have had such freedom in the use of public resources that any interference with that freedom would obviously call forth objections. Any legislative action, however, might be called 'interference' since it is impossible to conceive how a law regulating use and preventing misuse could be enacted and not interfere with some persons or with existing conditions.

But aside from the economic needs or demands of the live stock interests, I think it only fair to say that the Forest Service is entitled to credit

for its own efforts in attacking this problem more or less independently and in a way which would most nearly satisfy those economic demands, and at the same time keep in mind the protection and conservation of other resources, equally or more important. I refer to our timber and water supplies. It should be said, however, that in the regulation of grazing upon national forests of this country, the Forest Service has not launched out upon untried theories. Centuries of experience in the old world are presented to our study. But the Service has looked upon the question more or less independently and from a peculiarly national standpoint. If we were to have heeded unqualifiedly the messages that come to us from Palestine, Switzerland, Sweden, Italy, China, British India, various German provinces and other countries of the old world, our national forests would be supporting much less sheep and other kinds of live stock than they are today.

"We have in the United States considerably over 300,000,000 acres of public grazing land, an area approximately equal to one-fifth the entire area of the United States. It goes without saying that this area will diminish as better means of agriculture are discovered and applied. But just how much scientific and intensive agriculture will supplant grazing on many portions of the semi-arid West remains to be seen. Of one thing we are certain: That the so-called 'Campbell system' of dry farming has claimed for agriculture a lot of country in Western Nebraska, Kansas and the Dakotas; Eastern Colorado, Montana, Wyoming and New Mexico, which is perceptibly decreasing the general area formerly classified as grazing territory only. But in a general way it can be estimated that our public grazing lands, including those within the national forests, will be around 300,000,000 acres for a good many years to come.

"So in the West, and especially in its arid, semi-arid and mountainous portions, grazing is still and probably always will be of great importance to the people. Twenty-five per cent of the area of the United States is so situated topographically and climatically that it is best suited to the production of forage crops and must be devoted chiefly to grazing. Natural and economic conditions, therefore, have been large factors in deciding the importance of grazing, and the attention it should receive in national forest administration.

"True, then, the Forest Service did not create or evolve the present live stock business within the national forests. That came with the forests, a condition, an accessory. It existed long before the forests were even thought of in this country, and, no doubt, will be a large factor in forest administration for many years to

come. But the service has tried to meet this condition squarely and consistently. Regulations have been adopted and machinery invented to handle the current business as effectively as possible. These regulations have been changed from time to time; worn out machinery has given way to new and better, until, as far as actually handling the business of grazing goes, stockmen themselves concede that it has been done measurably well. So far we have worked very much along the lines of least resistance. The problem of national forest grazing is one which deals primarily with money values and present utilities. Our grazing administration, therefore, as much as or more than any other feature of national forest management, is immensely practical, because it is so immediately concerned with human interests. The average family of 4-6-10 persons consumes annually half a ton of meats, and there seems no immediate prospect of our people resorting to strict vegetarian diets. All the grazing work so far, then, has been based in a large measure upon former use. The grazing regulations have been purposely framed to interfere as little as possible with past and present use, and, at the same time, to detract as little as possible from the practice of forestry. This is right and as it should have been. The forest service, in other words, has been big enough to recognize the relative importance of our national live stock industry and

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POULTRY DEPARTMENT

The Petaluma Poultry Show

(By Judge Currier.)

Second to none in arrangements and quality of birds, if lacking in numbers compared with the Oakland and the Stockton exhibitions, was the fifth annual show at Petaluma, which closed December 10th.

In numbers Petaluma's market chicken, the White Leghorn, came in second, the Rhode Island Reds numbering five more—122 birds—while the total in the American class of 254, English class 241, a total of 495, as compared with Mediterranean class, 270, goes to show that people like something different than a Leghorn for table use, though they do lay a brown shelled egg. For quality and condition of birds no exhibit excelled the S. C. White Leghorns shown by M. Duttbernd of Petaluma, who made a clean sweep. The White Wyandottes of A. L. Jenkins of Sebastopol were another lot of birds in perfect condition. Without doubt this class was the finest string of birds ever brought together in the State, and although criticisms were heard in the placing of awards, it was an honor to get a place at all in such a class. The sweepstakes silver cup was won by Mr. Jenkins (the second time). In Rhode Island Reds, the largest class in the show, W. W. Hirsch of Irvington won first cockerel, first and third hen, second and third pullet and third and fourth cock. Jack Lee won two firsts, five seconds and four thirds. A pen entered by Charles S. Wakefield of Petaluma attracted much attention by their remarkably rich-colored plumage. Much criticism was heard on account of their being placed only third in the awards.

Orpingtons were a choice class. The exhibit of Blacks (nearly 100) was the largest ever shown on the coast. Marshall Black of Palo Alto took the lead in awards. Mr. and Mrs. W. S. Sullivan, of course, won first on Buff hen—Pet McClave—and other awards on their male birds.

Barred Plymouth Rocks were a choice lot. The exhibits of E. P. Sabin, Livermore, and Cobbledick & Co., Oakland, showed careful breeding.

In White Rocks Thomas A. Atkinson of Los Altos showed a choice pen, winning first. He also had a choice exhibit of Anconas, dividing honors with Mrs. R. P. Smith of Santa Rosa, who made a nice showing with these birds.

Among the new varieties the Buff Minorcas, shown by Mrs. I. H. Tuttle of Watsonville, attracted much attention, the first hen and first pullet being exceptionally fine birds.

Duckwing Leghorns, as shown by Bailey & Son of Haywards, were attractive, especially the plumage of the hens.

For solid-meated table birds none compare with Richard Keating's Cornish fowls, their heavy weight and finely laced plumage attracting attention.

But the heavy-weight of the show was George A. Smith's big Bronze turkey tom, weighing 60 pounds, from

the owner's ranch at Corcoran. He is said to be the largest turkey in the world. Two large hens with the tom won first and second prize. These birds, as well as many others owned and exhibited by our advertisers, shows the quality of our patrons.

The exhibitors were as follows:

EXHIBITORS.

S. C. White Leghorns—M. Duttbernd, Petaluma; E. R. Everett, San Jose; A. Schroeder, San Gregorio; Carl Gregory, Petaluma; W. R. Thompson, Petaluma.
Black Leghorns—Carl Gregory, Petaluma.
Silver Duckwing Leghorns—A. Bailey & Son, Berkeley.
S. C. Brown Leghorns—Mrs. William Bond, Newark.
Buff Leghorns—Herbert Lee, Petaluma; Guy Johnson, Santa Rosa; R. J. Mott, Petaluma; Carl Gregory, Petaluma; Dr. Peoples, Petaluma.
Black Minorcas—J. P. McDonough, Geyserville; Percy White, Petaluma; Herbert Peck, Petaluma; W. A. Tough, Petaluma.
White Minorcas—H. C. Scrutton, Petaluma; L. N. Cobbledick, Oakland; Nippin Farm, Petaluma.
Buff Minorcas—Mrs. I. H. Tuttle, Watsonville.
Buff Orpingtons—W. H. Ingram, Fruitvale; Mr. and Mrs. W. S. Sullivan, Agnew; Hopland Stock Farm, Hopland; E. H. Dole, Petaluma; Nippin Farm, Petaluma; J. D. Bennett, San Jose.
White Orpingtons—W. H. Ingram, Fruitvale; Marshall Black, Palo Alto; J. D. Bennett, San Jose; Mrs. R. P. Smith, Santa Rosa; Little Lake Farm, Willits; Mrs. B. Hagedorn, Oakland.
Black Orpingtons—Marshall Black, Palo Alto; J. E. Pearson, Pasadena; W. H. Ingram, Fruitvale; W. H. McKay, Stockton.
Rhode Island Reds—W. E. Gibson, Niles; Jack Lee, Petaluma; C. S. Wakefield, Petaluma; R. S. Kennedy, Sebastopol; W. W. Hirsch, Irvington; J. W. Bauer, Petaluma.
S. C. Rhode Island Reds—Jack Lee, Petaluma; W. W. Hirsch, Irvington; W. E. Gibson, Niles.
Barred Plymouth Rocks—E. P. Sabin, Livermore; E. S. Kennedy, Sebastopol; T. A. Atkinson, Los Altos; L. N. Cobbledick, Oakland; Mrs. C. Felt, Santa Rosa; J. M. Montgomery, Oakland.
White Plymouth Rocks—T. A. Atkinson, Los Altos; J. Fahrenkrog, Sebastopol; Carl Gregory, Petaluma.
Partridge Plymouth Rocks—R. V. Moore, Oakland.
White Wyandottes—M. Black, Palo Alto; A. L. Jenkins, Sebastopol.
Buff Wyandottes—J. Stansfield, Fruitvale.
Black Wyandottes—J. Stansfield, Fruitvale.
Silver-Penciled Wyandottes—J. Stansfield, Fruitvale.
Columbia Wyandottes—Schmidt & Gunther, Sunnyvale.
Buckeyes—W. W. Hirsch.
Black Langshans—M. W. Nicholson, Oakland.
Buff Cochins—Mrs. C. Du Jardin, San Francisco.
Light Brahmas—Carl Gregory, Petaluma; A. L. Jenkins, Sebastopol; W. J. Collins, San Francisco; Mrs. C. DuJardin, San Francisco.
Blue Andalusians—H. P. Lichau, Petaluma; Mrs. L. McLeod, Petaluma; V. Huntley, Petaluma.
Mottled Anconas—Charles Holman, Stockton; R. J. Mott, Petaluma; Mrs. R. P. Smith, Santa Rosa; Thomas Atkin, Los Altos; George Grindell, Hayward.
Silver-Penciled Hamburgs—Duncan Lee, Petaluma.
Houdans—Carl Gregory, Petaluma; Schmidt & Gunther, Sunnyvale; D. H. Anderson, Petaluma.
White Pit Hornets—William Hirsch.
Silver Brackels—G. B. McKinney, Santa Rosa.
Slilly Buttercups—G. B. McKinney.
Faverolles—Jack Lee.
Black Breasted Games—A. J. Holmes, Petaluma.
Silver Duckwing Games—A. J. Holmes.
Cornish Indian Games—Richard Keating, Palo Alto.
Pit Game—J. W. Robinson, Sebastopol.
Black Cochlin Bantams—F. A. Arnold,

Stockton; William Hirsch, Irvington.
Buff Cochlin Bantams—Ben Woodhull, Stockton; E. Keesling, San Jose; Henry Hoyt, Santa Rosa; William Hirsch, Irvington; Earl Gray, Petaluma.
Light Brahma Bantams—Carl Gregory.
White Cochlin Bantams—Mrs. J. Abderhalden, Petaluma.
Golden Seabright Bantams—W. W. Hirsch, Irvington; John McGovern, Petaluma.
Black Tailed Japanese Bantams—William Hirsch.
Japanese Silkies Bantams—Jack Lee, Petaluma.
Black Breasted Red Game Bantams—H. Hoyt, Santa Rosa; B. Woodhull, Stockton.
Bronze Turkeys—G. A. Smith, Corcoran; Mrs. William Bond, Newark; Ed Hart, Clements.

Bourbon Red Turkeys—Salvation Army, Linton.
Silver Seabright Bantams—Jack Lee.
R. C. Black Bantams—Carl Gregory, W. W. Hirsch.
Mammoth Pekin Ducks—William Hirsch, Irvington; Salvation Army, Linton; A. Z. Duck Ranch, Petaluma.
Aylesbury Ducks—V. Huntley, Petaluma; Mrs. C. Taft, Petaluma; E. F. Hopkinson, Petaluma.
Rouen Ducks—William Hirsch.
Indian Runner Ducks—C. E. Smith, Petaluma; G. Mesner, Petaluma; Guy Johnson, Petaluma.
Toulouse Geese—William Hirsch.
Emden Geese—Salvation Army Farm, Linton; William Hirsch.
Arkian Geese—William Hirsch.
Brown Chinese Geese—William Hirsch.
White Chinese Geese—William Hirsch.

Indian Runner's Mission Is to Lay Eggs

By Mrs. E. J. Melette, Hayward, Cal.

Now is the time of the year when the Indian Runner duck gets in its good work, when the hens are beginning to moult and the pullets have not yet begun to lay. It is a Runner's chief mission in life to lay eggs, and they have no word "season" in their language, for all months look alike to them, and especially do they lay in winter, when the angle worms begin to come to the surface. Nothing pleases a Runner better than to be allowed out to run at night, and the last thing before dark they can be seen running their bills down into the soft, muddy earth after the juicy worm. And then when the dawn begins to break they are at it again.

If a person does not mind wading around in the mud after eggs it is a wise plan to let them sleep where they will when the rains begin to come—that is, enough so that they can get worms. It is well to provide a good bed of straw inside, however, so that those that want to can sleep under cover, but very few of them will.

How to sell duck eggs is to some a puzzling proposition. They go around to every one and ask: "If I get some ducks will you buy the eggs?" and all the grocerymen shake their heads and say, "Oh, no; we couldn't handle duck eggs. No one wants to eat duck eggs. People will not buy them."

The writer had one groceryman say something like that to me one time recently when I took a crate of Runner eggs to his store. So I said, "All right. Put them back in the wagon. I can sell them."

Of course, he knew that meant no more trade from me, so he began to hem and haw and hedge, and he stood out in the sun and let me tell him a tale of what lovely, celestial eggs Runner eggs are, anyway, and how that in the East they sell them to hospitals and sanitariums, and first thing I knew he had the eggs out and in his store.

Some time after that the man who takes the eggs from that store to Oakland asked me how the ducks were laying, and when I was going to bring in some more, and he said that I got 5 cents more for my duck eggs than I was getting for my hen eggs.

Then I thought I'd try another store, and for a long time I took eggs to

them, one week hen eggs and the next week Runner eggs, and they went all the same and no questions asked, and this was a store where the eggs were all sold locally. But one time when the proprietor took the crate out he said:

"What kind of eggs are these? Duck eggs? There seems to be some kick about them."

Then I said a little piece to him, and he said:

"Oh, I can handle them all right, but when the boys come to get them just tell them when they are duck eggs."

So since that I do, and they go all at the same price as hen eggs. I have a neighbor who, with 500 hens, has to buy eggs for his breakfast or go without, and yet from one hunch of twenty-three Runners we are getting from 18 to 22 eggs a day, while the May hatched ducks are beginning to lay also—October first.

Some people are of the opinion that a duck must be fed some certain proportion of everything to get them to work, but it is a mistake. I have done quite a little bit of experimenting along the feed line, and I have found that all they ask is a good appetizing variety, with enough meat and bone meal, or rather granulated bone, to make a good egg ration. For the rest, besides green feed, they want mill feed and green feed, which may be fed in the shape of alfalfa meal. Cocoonat meal is also good.

Ducks that have been raised to be particular will not eat their feed when anything new is added, but they should be told to eat what the rest of the boarders do or else leave the table,



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Sacramento, Cal.



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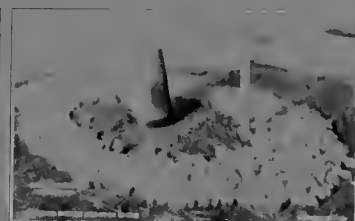
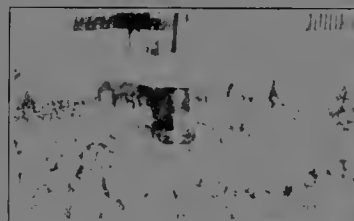
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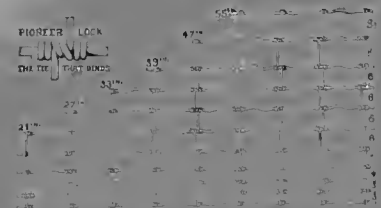
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THE LIVE STOCK ***and DAIRY JOURNAL***

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

FEBRUARY, 1912



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Our Percheron and French Coach Stallions showed for twelve prizes at the recent California State Fair, winning eight prizes, while all our competitors combined won but four.

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At the last six World's Fairs our Percheron and French Coach Stallions have won every highest prize and every championship.

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Come to Napa and be Convinced.

HENRY WHEATLEY.

THE LIVE STOCK and DAIRY JOURNAL

Volume 11

SACRAMENTO, FEBRUARY, 1912

Number 2

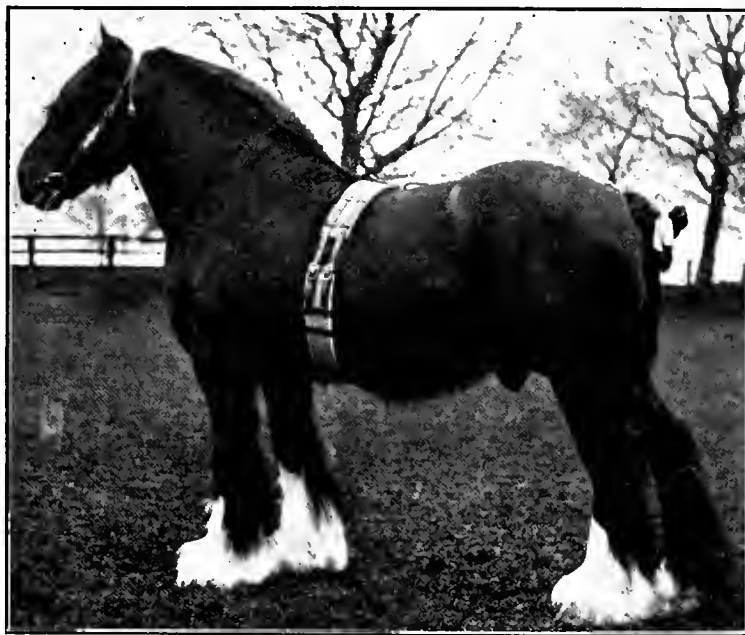
Increasing Popularity of the Shire Horse

By Henry Wheatley, Napa, Cal.

It is conceded by all that the growing demand is for large horses. The history of the horse in the older countries teach us that, as the roads improve, the demand for heavy horses increases. Also, our farming methods are changing. We are using heavier tools and machinery—all of which works in the same direction, towards the gradual elimination of the small horse, except as a driving horse, and the substitution of the drafter. If we are to raise draft horses it would seem to be the wisest plan to find out what class of draft horse is most in demand, and to try to produce that which the market calls for.

Some years ago the writer made it his business to interview several of the largest horse buyers in San Francisco, and the information gathered from them and other sources clearly pointed to the produce of the Shire stallion as being best suited to and commanding the highest price on this market.

In his best estate the Shire is a magnificent drafter. He has gotten a vast number of high-priced geldings from native stock, and it is on record that the highest price ever bid for



Lee Danial, Shire Stallion Imported by Henry Wheatley, Napa, Cal.

a gelding on the Chicago market was bid for a roan of this breeding.

Bulk, strength, depth of flank and ribs and a plentitude of bone are pre-eminently attributes of the Shire. These are qualities which we require in the grading up process, and there is no question that many of the best geldings ever got by French stallions have been out of mares of Shire blood.

It has been claimed for the breed that grading up may be accomplished to greater size more quickly with the Shire than with any other breed, and the writer believes this to be correct.

Mares carrying two or three crosses of Shire blood are probably the most valuable class of brood mares on the American farms today, and their foals command the highest prices, no matter to what breed of drafter the sire belongs. Everybody likes a good Shire gelding, his massive proportions, strong back, wide and well sprung ribs, long, straight stride and generally powerful appearance commending him to all.

In the past the people of California have had few opportunities of seeing and owning good Shires, but they are now to be had in the State, and are rapidly taking their place in the front rank.

Big Demand for Draft Horses

The liveliest winter trade in years has been enjoyed by importers and breeders of draft horses. The business done at the International and directly following it probably surpassed all records for that event, and it was a trade in the best, while mediocrity was neglected. Breeders and farmers have evidently given careful study to the course of the market in commercial horses during the last year, and have determined to aim high in future breeding. Prize winners, great sires and dams, show geldings and high-class commercial draft horses can not be bred from the cheap, plain stock with which the country is supplied. The breeders who have made a record by producing the best in draft horses are very few. Their success rests upon the superior foundation mares and outstanding sires which they have used. It is an encouraging sign of progress when the example of such breeders is generally followed. Although there were more draft stallions and mares of

genuine merit available this season than in any previous year, the large number has been rapidly absorbed. The dallying tactics followed last season by many prospective buyers left them late in the spring without such material as they desired from which to choose. They took time by the forelock this winter and got the best to be had. A number of importers have already hastened across the water in the last few weeks to replenish their stables. It is evident on all sides that there is urgent need for every good draft sire and dam that this country can secure if market demand for big geldings are to be met.—Breeder's Gazette.

Frank S. West & Son report some nice horse sales. A fine lot of seven—six mares and one stallion—all imported Percherons, went to Sierra Vista Stock Ranch at Chino. They also sold the coal black, 2-year-old imported Percheron stallion Goculo to Crawford Brothers and J. L. McCracken, Ukiah, Cal.

Draft Mares on the Small Farm

A neighbor who is working a small farm and feeding stock for market keeps four horses. Three of those are purebred Shire mares and the fourth is a light gelding. The latter is used to make the trips to town when the buggy or express wagon is to go.

The three mares do all the other farm work and there is work for at least a pair of them practically every day in the year, except Sundays. For such work as plowing, harrowing and seeding all three are used. More grain and hay is fed than is grown on the place, and the mares are needed to haul feed from the station.

These mares are kept for a double purpose. The owner believes that he can do his work just as well with big, purebred mares as with geldings or mules and raise colts from them besides. This is now his third year with them and he is highly pleased with the results. The first year he had only two. They had been recently imported, and one of them raised a splendid colt. The next year, after he had bought the third he raised two very nice fillies. Those colts when mature will sell for two or three times as much as grade stuff, and should be

worth \$500 to \$600 each at 3 or 4 years old.

That the small farmer can succeed with brood mares this man has proven. His work is heavy and must be done in all kinds of weather. His mares are doing more work in a year than are his neighbors' geldings.

What this man is doing others can do. There is no way by which profits can be more surely increased. Even with grades, if the mares are big, of the right sort and mated with a good stallion, the results are very satisfactory. A farmer in my township keeps half a dozen big grade mares, which he breeds to the best stallion he can find. As a result he has a number of young horses to sell every year. However, he receives only about half the price he could get for purebred animals. He is a splendid horseman and capable of raising as good stock as any one, and if he would change to purebreds he would just about double his income.

Some hesitate to buy big mares for fear they will be slow and clumsy. True, some big horses are, but not all. I have worked many a big mare

(Continued on page 13.)

The Live Stock and Dairy Journal

An Illustrated Monthly Publication for the Advancement of the Live Stock, Dairy and Poultry Industries of the Pacific Coast.

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If you want to buy or sell any stock or merchandise in the great live stock, dairy and poultry centers of the Pacific Coast, get in touch with our advertising columns. We believe all advertising in this paper to be from persons or firms of the highest reliability. Every effort is made to protect our readers against misleading representation. We shall at all times appreciate evidence that advertisers have acted otherwise than in accordance with principles of strict business integrity.

The Journal is issued on or about the 5th of each month. Copy for all reading and advertising matter must be in our office not later than the 25th of month preceding date of issue.

According to figures of the Fern-dale Cow Testing Association, covering a period of three years, the cost of keeping a dairy cow is approximately \$60 a year. At 33 cents per pound a cow that produces less than 181 pounds of butter-fat is not paying her board. There are many cows in California that are not coming up to the above figures, but their owners keep on milking them without knowing the difference. The cost of keeping a cow varies in different communities, however, and in addition to weighing and testing the milk it is just as essential that a record of feeding costs be kept.

Farmers who take notice of the trend of the market with regards to draft horses and produce a few colts of good weight each year cannot make a mistake. It costs no more to raise a \$300 horse than one that will bring only \$125, so why not breed for the big ones?

The several thousand people who read *The Live Stock and Dairy Journal* each month take the paper and pay for it because they are really interested in the advancement of the live stock, the dairy or the poultry industries. These readers represent the progressive element of California farmers. They are the ones who believe in better things, and who are most apt to buy high-class stock, implements and merchandise, hence the splendid results attained by advertisers in these columns.

Wheel and Saddle, the new San Francisco turf and horse magazine, issued a splendid holiday number, containing a great deal of interesting matter, nicely illustrated. The issue was, indeed, a creditable one, and more especially so for a publication that has only been in existence for a few months.

About the most important thing for a dairyman to keep posted on these days is whether his cows, as individuals, are paying a profit. Cull out the boarders.

The best cow is the one that utilizes to the best advantage what is fed her. But how many dairymen there are who have no idea what it costs to feed each cow or how well each one is utilizing her feed.

In Switzerland the Federal Government encourages the insurance of live stock by granting subsidies to all those cantons where such insurance has been declared compulsory for the farmers of the region or where the development of this species of insurance is encouraged by subsidies from the cantonal authorities. Live stock insurance in that country is carried on by three large mutual companies which extend their operations to all cantons. The Swiss farmer may guarantee himself with one or the other of these societies against all the more serious risks to which cattle are exposed, that is, against death in consequence of disease, accident or castration, their compulsory slaughter by the authorities and also against the diminished value of the animals due to the fact that in consequence of disease or accident they have become useless for the work for which they were intended.

Professor Kennedy of the Iowa Agricultural College, says while he was in England he found that the butchers pay a higher price for heifer beef than for steers, and in some sections they will buy only heifers if they can get them. They contend that the grain of the flesh is finer and the bone smaller, and therefore the heifer cuts up better than the steer of the same age. He says there is no sense or reason for the discrimination against a heifer in the United States.

Just as it takes years of patient and careful effort to develop a strain of cattle or swine, so it takes much time and labor to build up a publication to its highest point of usefulness and influence. In either instance it is a satisfaction to know that one is making progress.

H. O. Davis, one of the owners of Swineland, Yuba County, Cal., writes:

"I want to congratulate you on the strides you are making in the make-up and contents of *The Live Stock and Dairy Journal*. Every issue shows a decided improvement."

NOTES OF GENERAL INTEREST

The New Era Creamery at Gustine has an up-to-date plant, which is in charge of an expert butter-maker brought out from Wisconsin. Manager Haley has installed a system of making a daily report to each dairyman as to the weight of his milk, separation, sour cream, sweet cream or butter-fat, together with market quotations and the price paid by this creamery. This gives the dairymen exactly what the product of each day yields, and the innovation pleases them.

A field representative of the *Journal* visited the ranch of the Howard Cattle Company at Newman recently and found the Shorthorn cattle, Shropshire sheep and Berkshire hogs all looking splendid. The company recently brought out from the East a Shorthorn steer that is being fattened, and this, together with one raised on the ranch, will be entered at the fat stock show at Portland. The company has bought from Henry Wheatley of Napa an imported Shire stallion, which is the finest of his kind on the west side of the San Joaquin Valley.

Mrs. L. R. Hughson of Modesto has leased the Lee Jones ranch of 300 acres, together with 100 Holsteins, and she and her two sons will run the ranch, which is one of the finest properties in the Modesto district.

Ten dollars' worth of veal may damage your dairy herd \$100, so save the choicest heifer calves for milk cows, give them extra care and the best of grain and roughage for rations, and you will soon notice a marked improvement along this line.

It is poor policy to turn cows out to rough it as soon as they are turned dry, for a month or two in winter or early spring. This is the time they demand a good and regular ration. A cow is not going to do her best at the pail when calving time finds her run down in condition.

Now that the rains have put the ground in good condition for fence building, there will be widespread activity in that line. Prospective purchasers of fencing will do well to write California Anchor Fence Co., Stockton, for their new special price list B, which is a money saver.

FINEST ANIMAL IN THE ISLANDS

The Live Stock and Dairy Journal—Some three months ago we advised you that we had consigned six head of registered Shorthorn bulls to the Hawaiian Islands. Apropos thereof we have received from the manager for the consignees an unsolicited testimonial to the effect that one of the bulls, namely Orange Frantic (304969), "is the finest animal in the Hawaiian Islands today." Two head of young bulls have been shipped by us to Vina, Cal., and two others to Bakersfield, Cal. **HOWARD CATTLE CO.** San Francisco, Cal.

It is gratifying to the publishers of *The Live Stock and Dairy Journal* to know that the efforts we have been making in behalf of live stock improvement in this State are not in vain. We are almost daily confronted with evidence in some form or other that we have accomplished something. A. M. Henry of Farmington, Cal., writes:

"I greatly appreciate your very excellent paper, and also the earnest effort that you are making in behalf of the live stock industry in this State. I expect in the future to enter more heartily into the matter of exhibiting my stock, having become somewhat enthused by my pleasant acquaintance with you people at the Stockton Fair."

A LESSON IN BREEDING.

Fifty-one trotters took records of 2:10 or better this year. In the pedigrees of all except two the blood of Farnbletonian predominates, and the two are also from a recognized source of speed. Not a single 2:10 trotter this year comes from a source that is not known to be productive of speed. Any man who would attempt to breed trotters without trotting blood in the face of such evidence as this would thereby announce himself as a candidate for the insane asylum or the poorhouse. In other lines of breeding the evidence of the potency of blood is equally clear. Not a single market topping animal or a single great producing cow bred outside of recognized breeds or strains developed for these purposes has come to the front in all our history of markets, shows and tests. And yet many men are keeping dairy cows that are not bred for dairy work, trying to raise beef cattle without beef blood, and are not attaining success simply because they do not grasp the lesson the trotters, the great dairy cows and the market-topping meat animals teach us.—National Stockman and Farmer.

WELL-KNOWN STOCKMAN DIED

Fred Alvarez, who died in Woodland, January 22d, was well known to many of our readers, having been actively connected with live stock and dairy interests for a number of years. For several years he had charge of the stock at H. P. Eakle's farm at Woodland. Then he went to Berkeley and studied at the Agricultural Department of the University of California. Two years ago he accepted the position as foreman of the Timm Certified Dairy at Dixon, and held the position up to the time of his death. Deceased was aged only 28 years, and his untimely death is deeply regretted.

The Live Stock and Dairy Journal is read and appreciated in every State in the Union. W. H. Underwood of Ozark, Johnson County, Ill., writes:

"I am a subscriber to *The Live Stock and Dairy Journal* and prize it very highly."

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Free from tuberculosis. Official test certificate with each cow.
I sell these cows singly or in car lots.
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Young Bulls and Bull Calves. Also Heifers for Sale.
All well bred and most reasonably priced. Write or call on us. Immediate Delivery.
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HOLSTEINS
Nothing to sell now, but we are booking orders for calves for future delivery.

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We offer two fine Bull Calves, horn last October from A. R. O. dams averaging 3.7% fat. Calf's full sister A. R. O. at 3.8% fat average.
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MILK STRAIN

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I am breeding the finest stock in the West. Young bulls for sale—all pure-breds. Write for prices and pedigrees.
JOHN LYNCH,
Petaluma, Cal.
Holstein-Friesian Cattle
A Few Choice Registered Bulls and 25 Choice Registered Heifers.
Prices on Application.
CHAS. JAY WELCH, Los Banos, Cal.

ticular districts as Vice-Presidents, all of them being representative breeders.
I look to see more official testing done by breeders of Holsteins in the future, for it is evident, as Superintendent of Advanced Registry Gardner says, no breeder can make a success of breeding Holstein cattle and securing their worth without it. I believe that one reason why more of this has not been done in this State is because of the great distance of many of the breeders from the state experiment station and the consequent big traveling expenses of the tester, which must be borne by the breeder. If those who intend to make official tests this coming winter or spring will kindly correspond with me I will get in touch with them, informing them if any other breeders in his locality are intending to make any tests at about the same time, so that it might be arranged for both to bear the expense, and not have it fall entirely on one man. There are as yet several breeders of Holstein-Friesians who have not sent in applications for membership in the association, and I would urge them to do so as soon as possible, and do their share in promoting the interests of the breed throughout the State.
Sincerely yours,
JAMES W. MCALISTER,
Secretary California Holstein-Friesian Association.

ADDED MORE HIGH-BRED JERSEYS
The Live Stock and Dairy Journal—We have recently added to our herd, which already contained some very high-bred animals, ten head of pure-bred Jerseys from the George A. Smith herd at Corcoran, Cal. We have also received lately from H. C. Taylor's Brown Bessie Farm at Oxfordville, Wis., by express a 2-year-old son of Merry Maiden's 3d son, the latter being the grand champion of the Louisiana Purchase Exposition, and was bred by C. I. Hood of Lowell, Mass. If pedigree counts for anything, this bull is as good as any of his age in the United States. His grand dam on the dam side was the grand champion of the Chicago World's Fair, and he has a multitude of register of merit, high test and prize winning progenitors behind him.
F. O. FRAZIER,
Manager B. & F. Ranch.
Los Angeles County, Cal.

E. A. Starkweather, State Dairy Inspector, has recently had occasion to prosecute some of the dairymen of the Modesto and Ceres districts. While this section of the San Joaquin Valley boasts of some of the finest dairies in the State, a large percentage of which are kept clean, there are always some to be found who have not proper regard for the laws of sanitation.
SELLING UNPROFITABLE COWS
A farmer made the following statement after testing his milk cows the first time:
"I found that I had one cow that gave over 6,000 pounds of milk in a year. From her I could not help making a profit. I found that I had another that gave some 2,800 pounds of milk in a year. From her I couldn't help making a loss."
Every farmer should test his cows and find out how many profitable cows he is feeding and caring for. The unprofitable cows should be sold to the butcher.

Operate Your Dairy For Top Prices

OPERATE your dairy for top prices—and at the same time operate it as economically as possible. Top prices and low expenses mean greatest profits. One way to economize is to buy a separator that is built to give the greatest value for the money you invest in it; that is, one that will skim the closest and last the longest. That is why we want you to examine an I H C Cream Harvester before you buy any separator. An examination will convince you that

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are superior in design, material, and workmanship. Investigate for yourself. You will find that I H C Cream Harvesters are the only separators with milk and dust-proof gears that are easily accessible; that they are equipped with a patented dirt-arrester which removes the finest particles of dirt from the milk before it is separated; that the frame of an I H C is entirely protected from wear by phosphor bronze bushings; that the I H C has large shafts, bushings, and bearings. They have many other features that mean less work for you and longer life for the separator. I H C Cream Harvesters are made in two styles—Dairymaid, chain drive, and Bluebell, gear drive—each in four sizes. Let the I H C local dealer tell you all the facts, or, if you prefer, write nearest branch house for catalogues and any special information you desire.

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350 CALIFORNIA STREET, - - - SAN FRANCISCO.

Offerings by W. M. CARRUTHERS
Holstein Cows (grades), 75 head, to freshen in spring; Shorthorn Milk Cows, 100 head, choice milking strain; Hereford Bulls, 20 head, yearlings, large, heavy boned fellows; high-class Berkshire Hogs from herd headed by Baron Duke 95th. N. H. Gentry pronounced this boar greatest of the breed when he was sold to the Pacific Coast for \$2,500. The best is the cheapest. I undertake to make personal selections of anything you need in the line of live stock. Address:
W. M. CARRUTHERS,
401 Examiner Building
San Francisco.

Getting Results with Cows

The Live Stock and Dairy Journal—I think vealing the dairy calf the wrong thing to do. With the beef calf it may be different. If the milk from a good dairy cow the first eight or ten weeks is not worth quite a little more than the gain in the calf she had better not be kept for a dairy cow. And at the end of that time the disposition of the cow will not be as good as in the beginning, and the flow of milk will be less for the remainder of her milking period.

I raise heifer calves on skim milk with oil meal and alfalfa hay, and raise good ones, too. By keeping a record I find my best cows give \$20 to \$25 worth of butter the first eight weeks. I sell the bull calves shortly after birth, considering them a small part of the dairy income. Of course, if it is an extra good one I retain it for breeding purposes. The heifer calves, if rightly raised and of good dairy breed, always have a good cash value.

The time the cows are milked is very important. I want my cows milked as near 6 o'clock as possible, at night and morning, the year around. There are times when this cannot be done, but as a rule I turn in from the field in time to milk at that hour.

I have a good barn that can be made dark so the summer fly problem is solved. I plan to make milking a part of my day's work, and not an addition to it. If I did I would not blame the boys if they became dissatisfied with dairying.

Here in the West, where we raise an abundance of alfalfa, the mill-feed problem is solved. If I could not grow alfalfa I would grow red clover or some other protein crop and cut out the mill feed as much as possible. I feed crushed ear corn as a grain ration, with alfalfa, which makes a fine balanced ration and keeps the cows in good condition. I always have plenty of good corn fodder for day time feeding in winter, and give hay and bran evening and morning.

I have chosen the Holstein as a dairy breed because they respond so readily to feed. I know of no breed that equals the Holstein in the matter of milk giving. They are nice to handle, and a good disposition is needed in a dairy cow. I consider the value of a Holstein cow during her years of usefulness so much greater than one of the beef type that the carcass in the end cannot be considered.

One thing I would urge wherever possible, and that is weighing and testing the milk. It is easily done. I obtained a reliable pair of spring balances and hung them with a wire from one of the overhead joists. I tacked a large piece of heavy ruled paper on the wall, and on it placed the name of each cow.

The buckets are all of one kind and weight, so their weight can be easily deducted. The cows are always put in the barn to milk, which makes the whole thing very simple.

I weigh each cow's milk every Wednesday morning and night. This gives me an average for that week. By multiplying I have a monthly record, and by testing four times a year I have the amount of butter each cow produces.

One of my neighbors said to me not long ago that he always considered

the Babcock test a fad, and didn't think it necessary to take time to weigh and test the milk from his cows, but recently a certain contingency made it necessary for him to install the scales. Now he says that with this little contrivance his interest in his cows has multiplied many times, and he is as keen as a young boy with a new toy every time the cow is milked. He takes an intense interest in the yield of every animal, and if for any reason there is a falling off in the milk flow he goes after that particular cow and brings her back to the normal.

W. H. UNDERWOOD,
Johnson County, Ill.

DAIRY SHORTHORNS.

The Live Stock and Dairy Journal—I am a recent subscriber and am a lover of stock. My intentions are to start a dairy consisting of the Red Durham. I have some very fine cows—38 pounds at a milking is an idea of my best. I recently purchased a fine bull, but I do not know if he is in the milk strain. My idea is to know if you can give me any encouragement in my undertaking. If it would not inconvenience you too much I would be pleased if you could tell me, is there, as a general rule, butter-fat enough in this breed of cattle to justify any great amount of preparation for a profitable business? I presume they can not be beat for beef.

W. W. B.
Solano County, Cal.

Answer—The question you ask us in regard to dairy Shorthorns is one upon which successful dairymen have disagreed. It is, however, an unquestioned fact that the milk of the Shorthorn is rich in butter-fat, and the milk strain Shorthorn is bred to produce a volume of milk. We have in mind a dairy located at Galt, Cal., owned by F. H. Harvey, composed of something like 250 head of milk strain Shorthorn cows. This dairy is a wonderful butter producer, which is undoubtedly due to the fact that the owner is thoroughly posted as to how to get the best results out of that particular breed of cows, which requires somewhat different feeding for milk production than the other dairy breeds.

In your case you are treading on dangerous ground on account of your selection of a bull. The bull is half the herd, and as you say you have one of unknown dairy qualities you have no assurance that he will get anything but purely beef offspring. The strength of any recognized dairy breed lies in the record of known milk and butter production which is handed down through many generations, and the establishment of blood lines which produce a minimum number of low-producing cows. That being a fact, you might have a herd of high-producing cows and by breeding them to a bull of unknown quality get as offspring animals totally unfitted for dairy purposes.

In conclusion we would advise you to look well to the bull of your herd before you have laid out much money on a foundation. If you have selected the Shorthorn as your dairy breed, then by all means put at the head of your herd a bull of that breed known to possess good dairy qualities.

Frank Hatch of Modesto, who recently purchased six purebred Holstein cows at the Rutherford sale at Turlock, plans to bring out from the East one of the very best bulls of the breed to be had.

J. K. Corson of Modesto recently bought a splendid Holstein bull from Charles J. Welch of Los Banos for his dairy farm, where he has forty Holsteins and a number of Berkshire hogs. Mr. Corson plans to keep purebred stock only in the near future.

Plan your farm to reduce the necessity of buying additional feed to the lowest point.

The purebred Shorthorn steer, White Boy, champion of the North Pacific fair circuit in 1910 as a yearling and again the past season as a 2-year-old, was sold to the Portland Union Stock Yards Company at 12 cents a pound on foot. He weighed 2100 pounds, thereby bringing \$252. The steer dressed out 72.14 per cent, which is considered remarkably good. The champion steer at the International show this year dressed out only 66 per cent.

Abortion

In Cows and Mares

May be Prevented if

HOOD FARM ABORTION REMEDY

Is given promptly and freely on the first sign of abortion. Hundreds of breeders have saved valuable animals with this Remedy. By its use, with Hood Farm Breeding Powder, Abortion has been stamped out of many herds when other remedies failed.

Mr. D. M. Parker of Fayette, Iowa, says: "Two fine calves have arrived, both calves going overtime a few days. Cows and calves all doing finely. Am satisfied the Abortion Remedy deserves the credit, as both cows showed symptoms of aborting before beginning treatment."

We have been through the Abortion scourge in our own herd, and will gladly answer all questions. Write today, mentioning this paper.

PRICES: Abortion Remedy, prepaid, \$1.25, \$2.75 and \$9. Breeding Powder, prepaid, \$1.15, \$2.75 and \$5. Injection Tube, by mail, 90 cents. One medium Breeding Powder, one medium Abortion Remedy, one Tube, prepaid, \$5.75.

C. I. HOOD CO., Lowell, Mass.

DE LAVAL Cream and Butter Triumph as Usual at National Dairy Show

Cream and butter produced through the use of DE LAVAL CREAM SEPARATORS made the usual clean sweep of all Highest Awards at the great 1911 National Dairy Show (including the annual convention of the National Buttermakers' Association) held in Chicago October 26th—November 4th, just as has always been the case since the organization of the National Association in 1892.

WHOLE MILK CREAMERY BUTTER.

The sweepstakes or highest award in this class was won by A. J. Anderson, Otisco, Minn., with a score of 97.50, who says: "I have been using De Laval separators for ten years and would not think of using any other."

FARM SEPARATOR BUTTER.

The sweepstakes in the gathered cream factory made butter class was won by R. O. Brye, of the Readstown Creamery Co., Readstown, Wis., with a score of 97.33, this prize winning butter being made from the cream of farm patrons using De Laval separators exclusively.

Mr. Brye says: "I was raised on a dairy farm, where my father used a De Laval separator, and my own separator experience covers a period of twenty years. I have found the De Laval machines everything that is claimed for them."

HIGHEST PRIZE CREAM EXHIBIT.

The highest award for cream was made to Nichols Bros., Bloomfield, Ky., with a score of 98.80, who say: "If we didn't use the best separator we could not have made this record. Our experience has proved the De Laval the only separator that 'delivered the goods.'"

DE LAVAL PRODUCTS ALWAYS SUPERIOR.

Would-be competitors are naturally forced to make many claims for their separators. But the superiority of De Laval cream and butter, as evidenced by the winning of all highest prize awards the world over for twenty years, is something so overwhelming as to be indisputable and unanswerable even by the most reckless would-be competitor.

DE LAVAL DAIRY SUPPLY CO.

SAN FRANCISCO SEATTLE NEW YORK CHICAGO

National Live Stock Association Resolutions

Nineteen resolutions were adopted at the fifteenth annual convention of the American National Live Stock Association at Denver, Col., last month, covering every question of importance that came before the convention.

Resolution No. 1—Demands the retention of duties on live stock and its products. Declares that live stock and products of live stock, including wool, hides, meats and meat food products, and all products of the farm and ranch should in justice receive the same measure of benefit or protection as is accorded to the products of other industries of the United States, including manufacturers, without regard to whether it is called a protective tariff or a revenue tariff.

Resolution No. 2—Recommends the creation of a permanent nonpartisan tariff commission.

Resolution No. 3—Urges Congress to enact a law providing for the immediate valuation of railway properties, and the ascertainment of all details of cost and investment.

Resolution No. 4—Urges Congress to enact suitable legislation compelling the railroads to provide sufficient facilities to perform with dispatch their duties as common carriers in furnishing cars and transporting all freight, including live stock, and to promptly transport same, etc.

Resolution No. 5—Favors enactment of a law giving Interstate Commerce Commission power to prescribe a minimum speed limit for stock trains to suit the conditions in different localities.

Resolution No. 6—Indorses the administration of national forests. The association believes that there is evident intention on the part of the officers of the forest service to manage the forests so as to obtain from them the greatest amount of reasonable use consistent with their preservation.

Resolution No. 7—Urging Federal control of the unappropriated semi-arid grazing lands. The association believes that the prosperity and development of the stock raising industry on the public grazing lands of the arid and semi-arid West is seriously threatened by the present indiscriminate methods of grazing, and strongly recommends the early passage of a bill providing for Federal control of unappropriated grazing lands and a just and reasonable method of leasing such lands.

Resolution No. 8—Urges classification of unappropriated unreserved public lands into grazing and agricultural districts.

Resolution No. 9—Recommends that reservoirs on public lands be fenced to save stock from miring and dying where water recedes during dry season and leaves large areas of soft ground.

Resolution No. 10—Indorses measure before Congress providing that citizens who sink wells and obtain water on desert grazing lands be given patent to forty acres thereof upon payment of \$1.25 per acre.

Resolution No. 11—Recognizes need

of such currency reform as will render our present currency more elastic and responsive to the needs of business.

Resolution No. 12.—Urges upon Congress the repeal or amendment of the law of the United States which imposes a prohibitory tax upon the manufacture and sale of colored oleomargarine and similar manufactured articles, and, in substitution thereof, the passage of legislation which will insure the cattle raisers of their rights to free commerce in the products of cattle under such regulations as shall prohibit the substitution of oleomargarine for butter, and protect alike the dairy interests of the country and the raisers of beef, in a fair and equal opportunity in the food market of the United States and foreign countries.

Resolution No. 13—Opposes advance in commission charges for sale of live stock by commission firms of the National Stock Yards of Illinois.

Resolution No. 14.—Indorses the work of the Department of Agriculture under the management of Hon. James Wilson as having been of incalculable benefit to the farmers and stock raisers of the country.

Resolution No. 15—Recommends to managers of all live stock shows that breeding cattle be not admitted for exhibition purposes unless they have been properly tested for tuberculosis, and carry certificates showing them to be free from that disease.

Resolution No. 16—Urges that adequate provision be made in every State for the effective control of contagious and infectious diseases of live stock, thereby preventing the spread of such diseases through the shipment of infected animals to other States.

Resolution No. 17.—Indorses the work of the International Commission on Control of Bovine Tuberculosis.

Resolution No. 18—Indorses the action of the United States Live Stock Sanitary Association with reference to live stock sanitary conditions throughout the West.

Resolution No. 19—Recommends the appointment of W. E. Skinner, now President of the International Live Stock Exposition at Chicago, for the position of director in charge of live stock exhibit at the Panama-Pacific International Exposition in 1915.

HEREFORD BULL FROM IOWA

The Simon Newman Company of Newman, Cal., recently received from Iowa a Hereford bull that is as well bred an individual as could be found in the United States. He was selected by Colonel George Bellows from the herd of George Mayne of Iowa, and was brought to California under the care of Mr. Mayne personally, who was anxious to make safe delivery. The name of the bull is Young Donald, and his register number is 315,532. He is 3 years old and weighs 1900 pounds. He was sired by Prince Donald, he by Prince Rupert, by Beau Donald. On the dam's side he traces back to the same Beau Donald, through the famous breeding bull, Herod.

J. S. Mohr of Amador Valley, who has long been a breeder of Holsteins, has bought a few head of Dutch-Belted cattle as a foundation herd of that breed.

TWO KINDS OF OLEOMARGARINE

"The price of butter is high and there is every indication that it will go higher."

"The price of butter is now artificially held up by the existing tax on oleomargarine, * * * a tax which helps to increase the cost of living."

These statements appear in a circular which has been widely circulated among various organizations asking that they "pass resolutions requesting Congress to repeal this iniquitous tax."

Now, what are the facts?

Oleomargarine is a mixture of beef and pork fats with cottonseed oil. These are wholesome—singly and in combination they have a food value. This mixture—or oleomargarine as such—is practically nontaxed—having only a nominal tax of one-quarter of a cent per pound. This is so infinitesimal that it cannot add to the cost of butter or the expense of living. Hence the statement above quoted is misleading and erroneous.

When to natural oleomargarine, having a legitimate place in commerce, there is added coloring matter which makes it resemble ordinary table butter it loses its distinctive character and becomes an imitation or a counterfeit. The Government which practically puts no tax on natural oleomargarine, steps in and taxes the imitation of common table butter 10 cents per pound. Hence again the statement above quoted is misleading and erroneous. A tax on imitations and counterfeits has no legitimate connection with the price of genuine articles.

The reason for the 10-cent tax on imitation butter—not on genuine oleomargarine—is this: If there were no restrictive legislation, oleomargarine would be sold dishonestly in many, if not most, instances, to the injury of the consumer and the discouragement of honest business. This statement is proven by the history of oleomargarine. At the date of writing this, fair grades of table butter can be bought by dealers at about 30 to 35 cents per pound and retailed at about 35 to 40 cents. Honest oleomargarine can be bought at from 12 to 19 cents and retailed at 18 to 25 cents. Here then is an article which the economically inclined can use, if they wish, as a substitute for table butter with no injury to any one, and at a saving of some 15 cents per pound. But if there were no oleomargarine color laws, much of this substance would be colored so as to be undistinguishable by the ordinary consumer from butter and thus it would become an imitation as well as a substitute. In that case most of this 15 cents would be added to the amount paid by the consumer, for the enrichment of the dishonest dealer. This imitation product would be sold to the consumer, in most cases, as butter for from 35 to 38 cents, keeping a cent or two below the genuine article. This dishonest sale of an imitation product at an exaggerated price would injure the market for butter, would injure the producers of butter, would deceive many consumers who prefer the genuine product and would receive that which they did not call for, and would take 10 to 15 cents or more per pound from the consumers for enriching the dealers. This 10-cents tax on an imitation product

does not increase the cost of living to any one, but it stands to check dishonesty. It is not an "iniquitous tax." Organizations and individuals should not thoughtlessly countenance a movement to repeal this tax unless there is in sight something which will be equally or more effective in the interests of commercial honesty in an important food product.

GEORGE M. WHITAKER,
Secretary National Dairy Union,
Washington, D. C.

VETERINARY

We cordially invite the readers of the "Live Stock and Dairy Journal" to consult this department. Questions will be answered free by mail and a stamp should be enclosed for return postage. Give age, color and sex of animals, together with symptoms and previous treatment, if any.

I have a bay mare 6 years old; seems to be stiff and sore all over. I drove her sixteen miles, but did not feed or water her. Kindly tell me what to do for her.—W. H. R., Concord, Cal.

Answer—Your mare undoubtedly is foundered, which may result from exposure and hard driving as well as feeding or watering when warm. Get 2 drams of aloin from your druggist, add water to same and drench. Tie feet in sacks and keep wet. Feed bran mash. Provide warm and well-bedded stall.

I have a colt 3 years old which seemed to be bound up a short while back, so I drenched him with linseed oil. He is now worse than ever and does not eat. His head droops and he breathes quite heavy. Advise me through your valuable paper if anything can be done.—J. W., Nevada City, Cal.

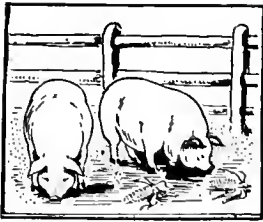
Answer—You have gotten some of the oil in his lungs and have produced a pneumonia. The possibilities of recovery are very slight. Provide a warm, well-bedded stall and fresh drinking water, and blanket well. Apply warm lard all over surface of ribs before blanketing. Repeat same twice daily. Give stimulants, as 2 teaspoonfuls of whisky every three hours.

STOPPAGE OF BOWELS IN CATTLE

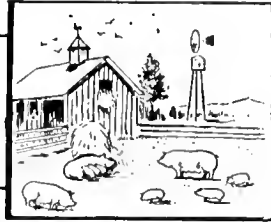
This is one of the most common ailments that cattle are subject to. At the same time more cattle die from this cause than any other, for the simple reason that stoppage is due to paralysis of the bowels.

In order to overcome stoppage of the bowels a treatment must be applied to overcome the ailment which causes it, such as paralysis of the bowels. Seventy-five per cent of the cases of stoppage of the bowels are due to partial paralysis of the bowels. In this case the bowels require a laxative and tonic, and not a physic, for if the bowels are paralyzed a physic will have a tendency to cause irritation, indigestion or inflammation and death follows. For this reason it is dangerous to give a cow salts or oil.

A cow thus afflicted should be given a laxative and tonic, plenty of drinking water, with the chill taken from it, bran mash made of flaxseed tea, also inject several quarts of warm water once or twice daily through the rectum by the use of the hose and funnel, and give the animal a reasonable amount of exercise.



THE SWINE HERD



The Feeding and Care of Swine

The Live Stock and Dairy Journal— I have been very much interested reading in your paper the letters from other swine breeders telling how they feed and care for their herds, and will write you something of our methods, as I think that such letters are the best thing a stock journal can have. Each breeder has a different system of caring for his herd, and when one writes we all learn something.

Our principal feeds are crushed wheat, cooked rye and Mealalfa. I mix equal parts of the wheat and Mealalfa and let it soak over night. Before I feed I add about 50 pounds of cooked rye to each 100 pounds of the wheat and Mealalfa mixture, and then enough water to make a thick slop. I feed just what they will clean up twice a day. This feed carries all the muscle and bone-making elements and, besides, it carries fattening and growing material. This is what you need in growing swine. Try this feed, fellow breeders, and see for yourselves. It was good enough to raise State Fair prize winners on last year. They had size and were in fine show condition. The young stock in the class under 1 year old weighed 300 to 400 pounds, while those under 6 months weighed 150 to 200 pounds. The older animals were all in show condition. You would be surprised to see how our Berkshires flourish on the above feed. Remember, though, that those show animals were finished off on corn for four weeks before the Fair. But just look at the weights. It was the feed that put the frame and bone there to make those weights.

I have just sold some Berkshire barrows that never had any grain. But they had the run of our orchard, which contains olives and almonds. They also had a five-acre patch of alfalfa to run in from the time they were weaned. I turned them in the orchard after we had picked the crop, and all they got for feed was what fell on the ground. These barrows weighed just 160 pounds each at nine months, when we sold them. So you see how hogs will flourish on alfalfa. It makes frame so that you have good-sized hogs when you want to sell them at 6 months to 1 year old.

I have a small patch of carrots growing the year round. I try to give one to each animal every day. These do them a world of good. They carry medical properties and keep their bowels open. I never put salt and charcoal in a box. The pigs waste twice as much as they eat. Here is a saving way: Mix your salt and charcoal in some kind of feed or in a slop. Then they get it all without waste.

I try to keep the drinking water clean and pure. I take a piece of asafetida, put it in a bag and nail it to the bottom of the trough, also

putting a small piece of bluestone in the water about once a week. It is surprising to see how pure and sweet the water trough keeps. This makes them drink a lot more water than they otherwise would. I have been watching them on this one thing more than anything else. Water is one of the main necessities for a growing hog, and the cheapest thing you can give him. I believe you will all agree with me on that point.

I keep a rubbing post for the hogs to rub against. I take a piece of inch cotton rope and soak it in crude oil, then wind it around a post. The rope gives them something rough to rub against. About once a month I take a brush and put more oil on the rope, which outlasts a sack, as the little pigs can't tear it off, as they will sometimes do with a sack. But the best way I have found so far is to roll up my sleeves and take a brush and crude oil and rub it on them. Don't be afraid to put it on. If you have a big lot of swine, build a dipping trough of concrete and use sheep dip, into which pour some crude oil. I have seen both of them used, and it has done some fine work. Twice a year is enough—just before winter sets in and just before warm weather comes on. If you follow this plan you will be surprised to see how fine your hogs look, what a fine coat of hair they have and how nice and smooth their skin is.

Now I will tell you how our Berkshires are doing. I see in your paper that most of the Berkshire breeders that advertise have boars and sows in their herds sired by Kennett (106045). G. A. Murphy, one of the prominent breeders, was looking over our herd last month and he said that Kennett was one of the best Berkshire sires that the Pacific Coast ever had. When a breeder like Mr. Murphy and others say the same thing there must be something to it. I have just bought a promising gilt. Her sire is Baron Premier 16th (136414), and her dam Lady Premier of U. C. (133205). She has more Premier Longfellow, Baron Lee 6th and Baron Lee 4th in her breeding than any other sow on the coast that I can think of. If her breeding counts for anything she should be a great brood sow. I have also bought a line-bred Berry's choice gilt from Charles Goodman of Williams, Cal.

I hope to hear from other swine breeders through *The Live Stock and Dairy Journal*, as to how they feed and care for their herds.

JOSEPH LEVY,

Manager Locust Grove Farm,
San Joaquin County, Cal.

The world's record hog sale was recently held at Mount Sterling, Ill. Thirty-six head of Duroc Jerseys sold for \$10,000, an average of \$303 per head.

WORMS IN PIGS.

The Live Stock and Dairy Journal— I learned a great deal about worms in pigs several years ago through having a siege of them in my herd. There is nothing that hinders the growth and development of pigs more than these intestinal worms, which are often six to ten inches long. They keep the intestines in a constant state of irritation and consume most of the nutrition that is in the feed.

I have tried several cures and have read of a number of others that are claimed to be successful. One of the simplest is turpentine, which may be fed in slop or milk. About one teaspoonful each day for three days to every one hundred pounds of pig is about the right amount. The pigs should not be fed for ten or twelve hours before administering treatment. As in many other instances cleanliness is a great thing in the matter of keeping the herd free of worms. The parasites breed and their eggs develop in filthy places.

Another thing I have tried for worms is putting a small quantity of copperas in their feed for several mornings in succession. I have heard of using lye for this purpose, but it is very strong and should be used very sparingly, probably a teaspoonful to a barrel of slop. Another thing that is recommended is to keep charcoal, salt, copperas, lime and ashes in dry state before the hogs all the time as a tonic and a preventative. I know of one of my neighbors having cured pigs of worms by using gasoline as a drench. He used a tablespoonful of gasoline mixed with six tablespoonfuls of milk as a drench for each pig. They were not fed for fifteen hours before drenching, and the treatment was repeated five days later. I understand that this treatment is successful for worms in sheep as well as in pigs.

J. W. WHITMAN,

Monterey County, Cal.

A TIMELY SUBJECT.

As farrowing time for spring litters is approaching we believe that it would be a splendid time for some of our swine raisers to exchange ideas as to how they care for the sow and her litter. We should be pleased to publish articles on this important subject in our March issue, and if any of our readers have suggestions to offer along these lines we should be glad to hear from them.

GET RID OF THE WORMS.

The American Swineherd, a good hog authority, says the most of the cholera and swine plague could have been prevented by paying more attention to the general condition of the hog, and says if you will get rid of the worms in the hogs you will have found the root of all evil. They will even need less feed if free from worms.

Swineland

HOGS ARE GUARANTEED

with a guarantee that means
YOUR MONEY BACK
if you are not satisfied.

A few very fine

Duroc-Jersey Boar Pigs, \$25. each

These pigs are of August and September farrow, and now weigh from 100 to 125 pounds. They are good enough to head any herd. Send us your order and if you are not more than satisfied with the pig we ship—send him back and get your money.

SWINELAND TAMWORTHS and BERKSHIRES

Are rich in the best blood lines of
the respective breeds.

SWINELAND

BOX 161. YUBA CITY, CAL.

O. I. C.

THE BIG WHITE HOG.

Two hundred and fifty to 300 pounds at 8 months. Best and largest herd in the State.

Write us your wants. We can fill them. All our stock is registered.

STUDARUS & CUNNINGHAM
MILLS, CAL.

RED DUROC HOGS

Best Bred Stock Now in
California

YOUNG STOCK AND SERVICE BOARS AND
SOWS FOR SALE

All registered pure-breds, and from such sires as Wonder and Klondike. New Importations from Missouri and Indiana. We are located in the Imperial Valley, and are here to supply California, Oregon and Arizona breeders. Write for prices and pedigrees to

MOORE BROS.,

Box 202, El Centro, Imperial Co., Cal.



FOUR OAKS STOCK COMPANY

Woodland, California



BREEDERS OF BERKSHIRE AND HAMPSHIRE HOGS.

Their breeding is as good as it is possible to obtain. Since selling our herd boar, Double Premier (88215) to Mr. A. B. Humphrey of Mayhews, Cal., and Kennet (106045) to Mrs. C. E. Byrus of Woodland, we have put at the head of our herd Ravenwood Longfellow 10th (136430), assisted by Holt's Longfellow, a son of Double Premier (88215). We also have a Double Black Robinhood boar to breed our twenty head of Double Premier gilts to for spring farrow. A few of our mature sows are Ravenwood Duchess 92d (140527), Trixie M. (120796), Star 3d (120795), Royal Lady 10th (121407), Berrys' Eclipse (151956) whose sire sold for \$1000 this fall; Belle Wilts 14th (113497), Lady Premier 3d (106046) and Woodland Lady Premier (144095)—the best one we ever raised; sired by Kennett (106045).

Correspondence promptly answered. Our prices are reasonable for quality of stock.

DUROC JERSEYS AT MODESTO

BOARS, SOWS AND YOUNG STOCK FOR SALE.

Registered Duroc Jerseys. No better anywhere. Write for prices. Have stock for immediate delivery. Address:

JOHN P. DAGGS

BOX 5, R. F. D. 5 (One Mile North of Town), - - - MODESTO, CAL.

Poland Chinas and Berkshires

The California Polytechnic School has for sale some well bred Berkshire gilts in pig to Ames Rival 5th (135041) and Baron Geronimo (153625). Some well bred Poland China gilts in pig to Hillcroft Hero II (61369). Choice young boars of both breeds coming on.

Address:

CALIFORNIA POLYTECHNIC SCHOOL,

Animal Husbandry Department. SAN LUIS OBISPO, CAL.

**REGISTERED
POLAND CHINA SWINE
PRIZE WINNERS**

Finest Stock in the State from \$30 up

M. BASSETT, Breeder HANFORD, CAL.

**SUNNY SIDE STOCK FARM
BERKSHIRES**

Young Stock from Blue Ribbon Winners For Sale

G. A. MURPHY PERKINS, CAL.

The Good California Kind

Medium-Type Poland Chinas

A number of young boars and sows for sale from seven to nine months old.

W. BERNSTEIN :: :: HANFORD, CALIFORNIA

**OAK GROVE DAIRY FARM
Berkshire Hogs**

We still have seven Boars left, of fashionable breeding, from 5 to 6 months, that are good enough for herd headers. We will, to make quick sales, price these Boars from \$30.00 to \$50.00 each, registered and transferred, f. o. b. Woodland. Furthermore to every one who buys one of these and mentions *The Live Stock and Dairy Journal* we will present one year's subscription to the *Journal*. So be sure and mention the *Journal* when you write.

Also have a few Gilts left that we will price right. Also a few Boars, utility stock.

ARMSTRONG & SON Woodland, California

The Hog Louse

(From a University of California Bulletin.)

The poor condition of health and stunted growth of some droves of hogs, where other hogs thrive on practically the same food and care, is frequently due to the presence of parasites on the skin of these animals.

The hog louse is a bloodsucking parasite, and is large enough to be easily visible to the naked eye. When a drove of hogs is not thriving properly, a careful examination of the animals will frequently show that the unthrifty condition is directly traceable to the presence on the skin of large numbers of lice.

When lice increase in large numbers, as they are likely to do if not destroyed, the skin of the animals becomes covered with scales and sores, and in extreme cases, swelling and inflammation develop as a result of the parasites piercing the skin with their mouth-parts hundreds of times each day in their effort to secure blood for food. The irritation thus produced is a source of constant annoyance and worry to the hogs, evidenced by their restlessness and incessant rubbing and scratching against any convenient object. The ultimate effect is to seriously interfere with the growth and fattening of hogs, especially of young pigs.

The destruction of this parasite is a comparatively easy matter, and practical tests have demonstrated the economic importance of freeing hogs from the louse. It interferes with the growth, weakens the general physical condition, and as has been reported by different experimenters, renders the animals an easy prey to contagious diseases.

Any treatment to prove effective against lice on hogs must include preventive measures as well as destructive remedies. The sleeping quarters of lousy hogs become infested with lice, which crawl off the hogs and secrete themselves in the crevices of the woodwork and in the hedding, while the eggs on the hair that the hogs shed and rub off will hatch out young lice. These parasites in the sleeping places immediately reinfest animals from which the lice have been removed by treatment, or perhaps animals that have not been previously infested with lice. A thorough treatment, therefore, includes the destruction of the lice in the buildings and pens in addition to treatment of the animals themselves. If the pens where lousy hogs have been kept are left vacant for a period of two weeks all lice will have perished, and any new animals introduced will be in no danger of infection.

For disinfection of buildings apply a 3 per cent solution of any of the coal tar preparations, such as kresol, creolin or zenoleum, to be applied with a broom or spray pump. For treating the floors, air-slaked lime having a little carbolic acid added has been recommended for dusting over the surface. Whitewash made by slaking lime with water (1½ pounds to 1 gallon of water) and applying it to the surface has been found effective in combating lice in buildings.

In treating hogs infested with lice special attention should be given to those parts of the body where the lice congregate in greatest numbers. They

Duroc Jersey Swine

Champion herd of California, and champion 6 months boar of Oregon heads my herd of gilts from which I expect great results. Young stock, both sexes, for sale at right prices. Booking orders for February pigs.

J. K. FRASER,

DENAIR, CAL. San Joaquin Valley.

Knob Hill Stock Farm

REGISTERED POLAND CHINA SWINE

Stock of Various Ages, Both Sexes For Sale

A. M. Henry, Proprietor Farmington, Cal.

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**BERKSHIRE HOGS, DORSET SHEEP
TROTTER HORSES**

Breeder of Sonoma Girl 2:05½
Charley Belden 2:08½, etc.

Farm 2 miles west of Santa Rosa on the Electric Railroad. Fare, 5 cts.

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902 J Street Sacramento, Cal.

O. I. C. SWINE

Champions of the Northwest. Also Hampshire Sheep, and A. J. C. C. Jerseys. Fancy Poultry.

ED. SCHOEL,

Albany, Oregon,

The pig is merely a meat producing machine and the more he is fed—with good judgment, of course—the more meat he will turn over.

After farrowing when the digestive system of the sow has reached a normal condition her rations should be gradually increased until she is getting all she can eat.

are found principally inside, behind and in front of the ears, on the breasts and back of the forelegs. Even with the most thorough treatment, however, some of the lice are apt to escape, and these, if not destroyed soon, increase in numbers. The eggs are not all destroyed by any single treatment. These facts make it necessary to repeat any treatment used in order to entirely eradicate these pests from a badly infested herd.

Strange hogs added to a herd should always be examined for parasites in order that any infested animals may not be introduced to cause the spread of lice throughout the herd.

Many different preparations have been used to destroy lice on hogs. Some that were found successful in killing the louse proved injurious to the skin of the hog.

In Bulletin No. 69 of the Bureau of Animal Industry, United States Department of Agriculture, the following preparations are recommended for destroying lice on hogs:

Kerosene in a 10 per cent emulsion proved successful.

Creolin in a 3 per cent solution will destroy lice.

These may be applied by spraying or dipping in vats; the treatment to be repeated in two weeks. The latter method is more thorough and is to be preferred.

Formulas for kerosene emulsion are as follows:

Hard soap, ½ pound (one-half bar common soap); kerosene, 2 gallons; water, 1 gallon.

Boil the water and soap until the latter is dissolved, remove from the fire, then add the kerosene and churn or agitate vigorously until an emulsion is formed. This emulsion if thoroughly mixed will form a gelatinous mass on cooling, it keeps indefinitely and may be used at any time by diluting with warm water to 20 gallons. If used after cooling, the mixture should be heated again (great care must be exercised in heating a second time because of the inflammable kerosene present, and for safety the mixture should be heated out of doors) and then thoroughly mixed a second time.

The second formula contains the following:

Sour milk, 4 gallons; kerosene, 2 gallons.

This formula has the advantage over the other method of making kerosene emulsion, as it avoids the necessity of making a soap mixture, the milk acting as an emulsifier.

In some sections of California pure kerosene has been applied to the skin of hogs for the destruction of lice. The best method of application is to place sufficient water in the dipping vat and add kerosene oil to a depth of one inch. The oil floats on the surface of the water so that the hogs, when driven through the liquid, emerge with a thin coating of oil over the entire body. The application of pure kerosene to the skin of hogs has been known to produce blisters and cause the hair to fall out; thus, the caution to use it in the evening in order to avoid the effect of the sun's heat on the skin freshly wet with kerosene must be strictly observed, and care be taken not to apply the oil too freely. In using the kerosene emulsion there is practically no danger of blistering the skin.

Feed Your Hogs Digester Tankage

and develop blue ribbon winners in the show ring and toppers in the market.

Results from feeding Digester Tankage are sure and economical. The accompanying letter from a prominent California swine breeding farm shows results obtained by them from feeding our Digester Tankage.

For full particulars and prices write,

Western Meat Company
San Francisco, Cal.

LARGEST HERD OF REGISTERED
HOGS ON THE PACIFIC COAST
BREEDERS
OF
SHORTHORN CATTLE
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11/20/11

Western Meat Co.,
San Francisco, Calif.

Gentlemen:--

Enclosed find check for \$45.00 for the ton of Digester Tankage you shipped us. The tankage is proving very satisfactory. We are using it on the entire herd and find it particularly useful at this time of year especially, when we are breeding our sows for spring litters. It is keeping them in fine shape and the herd boars are doing remarkably well.

Very truly yours,

SWINELAND

by

Hold Your Hogs for Better Prices

As we look back over the past two months we think of the losses to the hog breeders of California. The biggest loss has been on account of the low price of hogs and the high price of feed. On account of the lack of fall rains there has been no grass, and barley is far too high to make 6-cent pork. Alfalfa hay and skim milk are about the cheapest ration at the present time. Few people realize how much alfalfa hay hogs will eat until they watch them consume a forkful that is thrown to them. Frosted alfalfa will kill hogs if they eat too much of it.

Another cause of loss is disease. Probably more hogs have died of contagious diseases than during the same time for many years. The symptoms are different in many cases, but they can all come under the old name of cholera. Nearly every stock paper shows inquiries for advice and remedies, and the verdict usually given is cholera. This disease is more to be dreaded than smallpox in the human race, as it is far more fatal and hard to stamp out. I believe the germs will live for many years in the soil, so for future safety it is best to burn all carcasses. No matter how deep you bury them there is danger of the soil being moved to make irrigation ditches, levees or cesspools some time in the future. I believe this is the cause of many of the outbreaks of the disease.

Hogs should be well scattered. Leave the sick ones in the old quarters and remove the well ones to new places after thoroughly disinfecting them.

The serum treatment is saving a great many hogs, but is costly, as one must treat the whole herd. The cheapest method is that of preventing the disease instead of curing it. Don't

let the hogs sleep in manure piles or around the straw stack in the wet straw. Don't let them drink stagnant water, but take pains to keep an iron or cement trough full of water where they can get it at all times, and if you think they don't drink enough put a little middlings in it. Use some good tar dip frequently on the hogs, in the pens and trough, and keep them free from lice and other parasites.

I predicted 8-cent hogs for February, but the price hasn't started to climb yet, and the farmers are still hauling hogs. There was a good crop of pigs, and everything that is large enough is being sent to market. It doesn't seem possible that there will be enough coming now to keep the price down. High-priced grain and cholera scare is the cause of this. The man who holds his until the raise comes will not lose.

G. A. MURPHY.



Jenette Lee, Champion Berkshire Sow, Owned by G. A. Murphy. Won 90 Ribbons in 1909, Also Both Premier Championships at A. Y. P.

There is no animal that responds so quickly to good treatment and generous feeding as the pig. And none that will degenerate so rapidly if not cared for and poorly fed.

DIGESTER TANKAGE A VALUABLE HOG FOOD

The swine industry of California is showing unmistakable signs of that growth which will eventually place this State among the leaders in swine production. Not only is there a heavy demand for the best quality of foundation stock for breeding purposes, but there is also a keen interest displayed in ways and means of properly and economically developing swine to the highest point, both for show ring and market. There are comparatively few swine breeders in the State who have given proper thought to the all-important question of feeding. The few who have given feeds and feeding the right kind of attention are the men whose herds bring home the blue ribbons from the shows and the big checks from the butcher.

The fact that an abundance of coarse feeds have been easily obtainable has, no doubt, contributed largely to the neglect in testing the merits of concentrates. In the leading swine producing states of the Middle West, even where there is an abundance of the pork-building corn, the value of concentrates is recognized by the big breeders and feeders, and they are used extensively and profitably.

As a food for both building and finishing, Digester Tankage, a packing house product manufactured especially for the feeding of hogs, bears the indorsement of the leading breeders, feeders and agricultural colleges of the country. This product, which is composed largely of dried blood, is made only from materials which have been inspected and passed by the United States Government.

Analysis of Digester Tankage shows 60 per cent protein, 8 per cent fat and 6 per cent phosphate. Results of tests carried on by leading agricultural col-



SHEEP



National Forests and the Sheep Industry

(Second Installment.)

(From a Paper Read Before the California Wool Growers' Association by John H. Hatton, Assistant District Forester, District 5, in Charge of Grazing.)

What has been the effect of the application of the grazing regulations to the sheep industry within the national forests?

Most of the national forests in this country have been under administration only about five years, and in that time a great deal has been accomplished toward the classification of the ranges between different kinds of stock. Much has been said about the natural prejudice against the sheep grazing, and much is still expressed where there is a conflict of sheep and cattle interests. I think that all agree there is no question but sheep can do an immense amount of damage to any range if overstocked or improperly handled. Any kind of grazing improperly handled can do much damage. But one of the good results of range management, as just indicated, has been the classification of the national forest ranges into sheep and cattle districts, and the allotment of grazing privileges to individual permittees; and it has been done without the old-time use of firearms or the wanton destruction of dumb brutes or the loss of human lives. Range wars have been unknown in the national forests.

Whether within or without the national forests, the time has come when all thoughtful and observing stockmen are agreed that certain regulation or control of the public grazing lands by the Government is necessary to the very life of the stock industry itself. Any one familiar with grazing conditions in the West during the past dozen years was bound to realize that the old unrestricted use of the public ranges must give way to systematized methods. "The survival of the fittest" has been a natural law in all progress, but in the battle for supremacy on Uncle Sam's free public domain, many who were not so fit from the standpoint of equity were permitted to survive, and the forage crop has usually paid the penalty of the controversy.

"Human nature blindly revels in Nature's gifts and favors and falls asleep in the midst of her profusion." Man is usually forgetful of that which he does not own.

There is no question but that the history of grazing on the public domain without regulation has been one of depletion and disaster where competition has been rife. It has not always been due to what we term overgrazing, but to the use of the ranges in improper seasons. There competition was rife, and it was a question of "first come first served," everybody who had any selfish interest in

a particular range didn't wait on any ceremony and the forage wasn't given a fair chance to start. One of the most destructive uses of the open range was this so-called premature grazing. And right here is where the forest service has had one of its largest opportunities looking to the improvement of the national forest ranges. Within the forests there is some authority to regulate. On the outside ranges there is no control and no authority, and in the absence of mutual agreements among neighboring stockmen, it is "see who can get there first." Unfortunately, I may say, one of the best means of improving and increasing the carrying capacity of the public ranges outside the forests is illegal. I am not here to say that I favor the former practice of stockmen fencing up and monopolizing large ranges, or that this practice was good in its total effects. Its effect was obviously bad when viewed from the standpoint of individual equities, but it was obviously good when considered from the standpoint of forage alone. The abuse of this "common law" privilege, where individual man would control areas ranging from townships to counties almost, was what made Government intervention necessary and the removal of the fences. But the day of such fencing is past, and if the public ranges outside the national forests are to be conserved and restored to their natural and maximum carrying capacity, some form of outer control must be exercised. A great many stockmen are ready for it now. The main question seems to be how to bring it about. I believe the time is not many years distant when Congress will pass laws looking to the solution of the public range problem outside the national forests.

We believe, then, aside from all other considerations, that the protection given individual permittees in the use of particular ranges means just the difference between good mutton and indifferent mutton, good lambs and lambs not so good, where they would otherwise have to engage in a losing battle for position and put up with overgrazing. Conservative use of the range under service supervision has meant better growth and better weights. It may have meant less stock on some ranges, but we believe that regulated grazing and fewer numbers has spelled more actual profit to the stockman than overgrazing and hungry stock. The national forests produce some of the best lambs put upon the market. Data secured from the Modoc national forest in 1910 show that lambs brought at least 50 cents per head more and weighed an average of 10 pounds more than lambs produced outside the forest. This season the Modoc forest produced 78-pound lambs. Last year weights on 10,000 head showed an

average of 72 pounds, while outside the forest average weights secured on 3000 lambs showed only 62 pounds. Comparative figures from other forests are not at hand, but we hope to have them this winter.

What effects national forests have had on the sheep industry outside their boundaries I am not prepared to say. Such statistics as I have show that prior to 1907 there were more sheep in California and more wool produced, taking the State as a whole, than there have been since that time, but the total values on live stock have since been very much greater. This reduction in the number of sheep and in the amount of wool produced in the State as a whole has been ascribed by some to the extension of national forests and restriction of grazing areas. In a measure this may be true, but it has not been true to the extent that an unqualified statement would make it. It is only fair to assume that tariff agitation, the development of agriculture, reclamation and irrigation projects, homestead settlements, range depletion, etc., like in all other public range states, have had their influence upon the sheep industry, and the reduction in numbers outside the forests cannot be attributed to any one cause.

The Four Oaks Stock Company of Woodland reports the sale to H. V. Traynham of College City, Cal., sixteen head of Hampshire ewes and lambs and the buck that the company brought from England in August, 1910. They have also sold to the Yolo Orchard Company of Yolo, Cal., a fine March, 1911, buck lamb.

FOR BIG LIVE STOCK SHOW IN 1915

The Directors of the State Agricultural Society have joined in the boost movement for a record-breaking live stock show in San Francisco in 1915 as part of the Panama-Pacific Exposition. The following resolutions have been adopted:

"Resolved, That it is the sense of the Board of Directors of the State Agricultural Society of California that the general plan for a live stock display at said exposition should be projected on a scale so magnificent and generous as to interest breeders everywhere and bring together a showing of the best animals in all classes from all parts of the earth.

Resolved, That to this end, in view of the close relation of the industry to the best interests of mankind, the prizes given by the exposition management should be on a liberal scale, and we urge on the State Commission of California, which is authorized to supervise the expenditure of the \$5,000,000 appropriated by this State for exhibition purposes to set aside a suitable sum for the purpose, and let it be known at the earliest possible date that they will duplicate all awards

made to California exhibitors in the live stock department at the Panama-Pacific International Exposition in 1915. We emphasize early action in order that breeders may be prompted to improve their parent stock in time to raise up the highest possible type of animals for the great event.

Resolved, That in our opinion this plan energetically carried out would give greater stimulus to the breeding of better live stock than any measure ever heretofore undertaken, while the cost would be nominal compared to the benefits that would accrue to the human race, to say nothing of the epoch it would mark in the advancement of one of the greatest interests of the earth."

WILL OPEN THREE WEEKS LATER

In order to follow the schedule of the Pacific Coast Fair and Racing Association's schedule, the California State Fair will open three weeks later this year than it did in 1911, beginning on September 14th and closing September 21st.

When horses stand idle during the busy season, cut their grain feed in half.

Watering horses before feeding instead of after will prevent many an attack of colic.

CHAS. A. KIMBLE

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**RAMBOUILLET AND
AMERICAN MERINO
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FRANK A. MECHAM,
Petaluma, Sonoma Co.,

Phone Rural 166

California

POULTRY DEPARTMENT

Los Angeles Poultry and Pigeon Show

(By A. L. Jenkins.)

The great midwinter Los Angeles poultry and pigeon show, held in Fiesta Park, January 4th to the 10th, has gone down in history as perhaps the greatest of its kind ever held in California. Nearly three thousand birds were on exhibition in a gigantic tent erected in the park.

In point of good management and system I doubt if ever a show took place which was run on such a smooth scale, and too much praise can not be lavished on the officers of the association for making such a show possible.

The Orpingtons led off in grand style with a total of 412 specimens. Buffs took the lead with 161, and the Whites came a close second with 150. Blacks were 90 in number and had it over all the others by the sale of the first cock bird for \$500. There were more Orpingtons at this show than were exhibited in December at Madison Square Garden, demonstrating that this breed stands today without a rival.

Plymouth Rocks came in strong, with a total of 386 birds. Of these the Whites were 158, Barred 133, with other varieties making up the balance. The general condition of this exhibit was superior to many that were placed in other shows. The Barred specimens were in many cases superb.

The S. C. Rhode Island Reds were about the hottest class, as usual, in the show, numbering 169 fowls and shading from the lightest tan to darkest mahogany, with all manner of variegated specimens thrown in between. There is a wonderful fascination for the color breeder in this variety, and taken altogether in the number of fine birds on exhibition at the different shows this season and the ginger, vim and friendly rivalry among the breeders, certainly gives the Reds the palm, hands down.

The Wyandottes were out to the tune of 176 fine birds from all over the State. The exhibitors of this breed had a "get together" spirit and held one of the most successful club meetings of any specialty club during the whole show. They have staked out the trail and are going to keep it hot till this breed lands in first place in point of numbers in the future Western shows.

The White Leghorns were a feature, and, with one exception, were the best I have seen this season, numbering 118. A saucy, handsome young cockerel put it over the whole show by walking away with the grand gold medal offered by the American Poultry Association for the best cockerel exhibited by a member. He certainly deserved his honors. The Brown Leghorns were a classy lot, especially the bunch of cockerels.

A splendid showing of Black Minorcas, 113 in all, was most excellent and very well placed. A single exhibitor walked away with every first save one.

There were 44 Blue Andalusians, and some quick and hot sales were made in this class to the extent that everybody was sold out before the close of the show.

A grand lot of Light Brahmas and a few Cochins made the best showing in the Asiatics, unless it was the Black Langshans, which were very good.

Down in the Bantam alley you heard "Whip-Tail! Whip-Tail!" and came on to the largest and most interesting display of B. B. Red Games, 67 of the little fellows, and as for class, we were assured that no city outside of New York ever put up such a show. Three hundred and sixty-five dollars was realized for a breeding pen of this popular diminutive sport.

All other varieties ever heard of were there, and were good, too. The sum total of Bantams figured up to 207, and that means some Bantams.

There were fine displays of turkeys, ducks and geese, particularly of the Indian Runner ducks.

The pigeon display was not quite so large as might have been expected, but they were in a fine place in the tent and made a beautiful showing. Several of the best known breeders of Central California were there and carried off their share of the cups and ribbons.

One particular feature of the show was the display of breeding yards, consisting of one male and eight females. These were arranged in a

most attractive manner in different parts of the tent. To my notion some of the very finest fowls shown were to be found in the yards.

A spirit of hospitality never equaled pervaded the show, and the management provided a splendid banquet for the entertainment of visiting exhibitors. If the interest and enthusiasm keeps up, the management is going to have difficulty in getting quarters large enough to hold the show in 1913.

The Livermore Valley Poultry Association is planning a big show, which will be held at Livermore February 14th to the 18th. This will be a grand round-up of the season's shows, and promises to be a big affair. It will differ from the other shows in that breeding pens only are to be entered. Awards will be made by a committee of judges, comprising H. H. Collier, A. H. Currier, H. W. Gunston and Ben Woodhull. Big cash regular and special prizes will be awarded. Eugene P. Sabin is Secretary of the show. Entries have been received from all portions of the coast.

SOLVED THE FEED QUESTION

C. C. Ross, who has a poultry farm at Loomis, in Placer County, has solved the feed question by mixing dry mashers according to formulas sent out by the Agricultural Experiment Station of the University of California, these being fed in connection with dry grain. He does not believe in forcing egg production at the expense of vitality. Mr. Ross has at present 800 hens, and has incubator capacity for 4000 eggs every three weeks. He is raising White Leghorns for their egg-laying qualities, but is also hatching Barred Rocks and Rhode Island Reds for general utility.

NAPA SHOW NOTES. (By Judge Currier.)

The beautiful Napa Valley was the scene of the first 1912 poultry show, held January 4 to the 7th.

They made the record of bringing together the largest exhibit of Minorcas so far on the coast, 117 specimens having been on exhibition, including many remarkably fine birds.

A White Minorca hen owned by Cobbledick & Co. won sweepstakes for best female in show.

Another record was made in the number of specimens of Buff Minorcas exhibited, 37 birds, the choicest collection yet seen by the writer of this coming California creation, Hawley's Poultry Yards, Napa, winning highest honors.

There was a good display of Rhode Island Reds, W. W. Hirsch of Irvington winning principal awards, his R. C. Red pullet being almost ideal in shape and color.

Black Orpingtons were a good class, two fine pens from Green Island Poultry Farm, Napa Junction, winning on first and second pens. Sweepstakes for best male in show went to F. Lehman, Napa, on Black Orpington cock.

Secretary Rutherford of the Napa Association made a winning exhibit of his elegant White Plymouth Rocks, these birds attracting much attention.

Barred Plymouth Rocks were represented by specimens of unusual merit. The first cockerel, owned by Cobbledick & Co., was pronounced by Judge Berrar to be the best colored bird he ever saw.

The breeders about Napa also made a record on their Indian Runner ducks. The five exhibitors present represented several of the largest duck ranches in the State, and brought together the banner display of these popular egg producers.

Much satisfaction was expressed at the choice exhibit of W. W. Hirsch of Irvington, with a carload of water fowls, bantams and Rhode Island Reds adding much toward the success of Napa's first annual exhibition.

The exhibitors in the various classes were as follows:

Barred Plymouth Rocks—J. W. Dawdy, G. D. Ludden, L. N. Cobbledick & Co., Golden Rule Poultry Farm, F. L. Flint.

Buff Plymouth Rocks—Dauger Bros., W. Brupbacher.

White Plymouth Rocks—W. Rutherford, A. L. Banks.

Partridge Plymouth Rocks—W. J. Head.

White Wyandottes—L. N. Cobbledick & Co., Hawley Poultry Yards.

Columbian Wyandottes—W. C. Ames.

Silver-Laced Wyandottes—E. R. Bell, John Mitchell.

Rhode Island Reds—William Hirsch, C. S. Wakefield, H. R. Page.

Rose-Comb Rhode Island Reds—William Hirsch.

Buckeyes—William Hirsch.

Silver-Spangled Hamburgs—W. C. Ames.

Hondans—Vincent Smith, W. C.



White Leghorns in the Beautiful Castro Valley. Scene From Miss C. B. Carrington's Poultry Farm.

the American Breeders' Association passed last year has been good. The proposed breeders' law has been much discussed by sportsmen, and, as I have observed, there is none who is openly opposed to the common-sense idea that the breeders of game should be permitted and encouraged to rear game birds for the market. Ruffed grouse today are worth \$20 a pair for propagation, and there is a demand for a large number of them. I know a man who successfully reared these birds last season in a wild state on a small country place quite near New York. On the same ground he reared mallards and several species of quail and some Hungarian partridges. Since most of the birds were nesting wild they procured a good part of their food from the few acres of field and scrub oak. The cost of rearing these valuable birds under such conditions should be less than the cost of rearing poultry. No one is permitted to fire a gun on the place. Why should the owner of these birds be prohibited from selling some of them for propagation or as food?

Mr. Evans, who has prepared a paper to read before your association, told me a few days ago when he was in New York that he had about a hundred cock pheasants left over last season, since most of the purchasers bought more hens than cocks. Why should he be prevented from selling these extra birds as food?

THE RAISING OF POULTRY ON A TOWN LOT

There are many town-lot poultry raisers in California, but probably few of them have been as successful as P. B. Anspacher of Livermore, whose poultry yards occupy a space of 70 by 100 feet. The yards are managed by S. W. Jarrett, who frequently has as many as 2000 chickens on hand. They are kept healthy, too, which indicates that the soil of the Livermore Valley is adapted for raising chickens on the intensive plan. The Philo system is used throughout, except for a few modifications of the brooding system.

The original purpose of this plant was to raise broilers for the San Francisco market, and this is still the principal business, although considerable attention has been paid to breeding some high-class birds. The breeds represented are the Buff Orpingtons and the Barred Plymouth Rocks. The cut on this page gives a view of Mr. Anspacher's plant.

Professor James E. Rice, in his Cornell reading course for farmers, says: "Corn is an excellent grain. It is, perhaps, the grain most relished by fowls. Therein lies the danger. Fowls eat it so greedily that, it being a fattening food, they are likely to become overfat if it is fed too freely."

The most successful poultry raisers realize the importance of feeding their fowls properly balanced rations, and it is safe to say that no one can attain the highest success with poultry unless the right kind and the right quantity of foods are supplied.

PHEASANT LORE.

The Live Stock and Dairy Journal—I am glad to note the increasing interest taken in pheasant culture. It is a fine occupation for a woman, and a paying one, too, as there is good money in all varieties.

All varieties of pheasants are easier raised than chickens, maturing in five months and off your hands at a good price. A very few birds are needed as stock, so cost is nominal through the winter months, and there is no care and worry from sickness—only pleasure and delight. Give them plenty of dry dust to bathe in and they are content.

The breeding season will soon be here, and birds should be quartered so as to become accustomed to their surroundings, to produce a large egg yield.

My experience with Silver pheasants has been contrary to all statements I have read about laying when young. I obtained a pair of young birds, and great was my surprise when my Silver hen commenced laying about the middle of March. I raised a dozen young birds before their parents were in full plumage. I fed bountifully, for I found that they were large feeders.

Silver pheasants are very beautiful and obtain their full plumage the second year. The cock's tail reaches a length of two feet, and in color he is a purple black on the crest and on the under parts to tail. The upper plumage and tail are white, delicately marked with black lines. The face is covered with brilliant red wattles. The hen is dark brown, and both cock and hen have red legs. Eggs are size of domestic hen's eggs, and breeding season is from March to August. They are easily tamed, and may be allowed full liberty with domestic fowl.

The Golden pheasant is the most brilliantly beautiful bird in existence, and said to be the easiest raised of all pheasants. Golden pheasants do not come into full plumage until the second year. The cock has a crest of pale orange; the tippet is of deep orange, margined with blue-black; breast, intense red; shoulders, green; wings, steel blue; tail, brown with black spots and five stiff red feathers on each side. The hen is a quiet brown and yellow. Breeding season, April until August.

What is merrier than to see the

beautiful Golden cock dancing up and down his cage. Sometimes he will drop his wings and spread his rich golden feathers all over his back as he turns from side to side whistling a song. Again he will spread his tail, which reaches a length of twenty-eight inches, sweeping it gracefully along as he walks to and fro.

Each variety has its individual beauty, but for commercial value the Ring-Neck, standby of the epicure, and second to no fowl for daintiness and tastiness, leads the other varieties.

MARY P. MARSHALL.
Stockton, Cal.

THE POULTRY SHOWS.

Jack Lee, the well-known poultry breeder of Petaluma, has issued a lengthy public letter reviewing the various shows of the past season, and offering advice to the managers thereof, whereby he believes the manner of handling the exhibitions might be improved upon. Emphatic criticism is directed at the State Fair Poultry Show, which **The Live Stock and Dairy Journal** has heretofore criticised. The letter was received too late for our January issue, but the introduction thereof calls attention to some facts that cannot be overlooked. Mr. Lee says:

"The past year has been a record for new shows on the Pacific Coast. Five years ago we had Los Angeles, San Jose and Oakland. Now we number more than a dozen towns that have held shows during 1911, showing the interest taken in fancy poultry to be 30 per cent more than five years ago. This shows that the scrub hen will very shortly be a thing of the past, and this is as it should be. On a great many farms can be seen utility and fancy stock of one breed only.

"There can be no doubt but that the show room is the educator; it shows the farmers what a breed should be, and makes fanciers by the thousand. Go to it, everyone, there is room for all. Keener competition is what we want; it makes the old fancier sit up and take notice and improves the quality of the stock of all breeds. A few years ago any old thing could win in some classes. Not so now. All shows have better quality today than they ever had.

"There are lots of people who realize that 1915 will produce some of the best birds California has ever seen, and California, to hold its own, must start now to get the goods that will win at the Big Fair. Let them be raised in the State and show the East what we can do."

Poultry Breeders' Directory

Under this heading, for a nominal charge, payable in advance, we will insert names and addresses of breeders of various varieties of poultry. This is done for the convenience of owners of flocks who wish to keep their names before the public the year round. Display advertising is undoubtedly the big business getter of today, but no doubt there are many breeders who are not justified in carrying a display ad during the entire year. To such breeders the economy and convenience of this column is readily apparent.

S. C. WHITE LEGHORNS.

M. Duttbernd.....Petaluma, Cal.
E. W. Trout.....Salinas, Cal.
Oaklawn Poultry Farm, Kirkwood, Cal.
C. B. Carrington.....Hayward, Cal.

RHODE ISLAND REDS.

Mrs. Jessie Hinkle.....Folsom, Cal.
Jack Lee.....R. 3, box 58, Petaluma, Cal.

BARRED PLYMOUTH ROCKS.

F. W. Hardman.....Volta, Cal.
L. N. Cobbledick & Co.....Oakland, Cal.

WHITE ORPINGTONS.

Dr. V. B. Watson.....Castroville, Cal.
Mrs. O. S. Moore, R. 1, Bx. 49, Modesto.

WHITE WYANDOTTES.

Dr. V. B. Watson.....Castroville, Cal.
M. A. Pilgrim.....Chico, Cal.
A. L. Jenkins.....Sebastopol, Cal.

BUFF LEGHORNS.

Frank Craig.....Larkspur, Cal.
P. Ellis.....R. 3, Modesto, Cal.

ANCONAS.

O. E. Palmer.....Dinuba, Cal.

BLACK MINORCAS.

W. A. Gerdes.....Pacific Grove, Cal.
J. P. McDonough.....Geyserville, Cal.

WHITE MINORCAS.

L. N. Cobbledick & Co.....Oakland, Cal.

BUFF MINORCAS.

Mrs. I. H. Tuttle.....Watsonville, Cal.

S. C. RHODE ISLAND REDS.

Mrs. M. A. Saylor.....Orland, Cal.
B. H. Brubaker.....Corning, Cal.

ROUEN DUCKS.

Mrs. F. W. Butler.....Princeton, Cal.

INDIAN RUNNER DUCKS.

Mellette & Co.....Haywards, Cal.

PHEASANTS.

Mary Marshall, 345 South American Street, Stockton, Cal.

CARNEAUX PIGEONS.

Frank Craig.....Larkspur, Cal.
Mrs. A. Monahan, 525 E. Hawthorne St., Stockton, Cal.

Some people presume that young chicks, ducks and goslings ought to have as much sense as a grown man. Maybe they have as much as some men, but they must be cared for as though they had not.



View at Livermore Poultry Yards, Where 2000 Chickens Are Often Kept on a Town Lot.

Questions and Answers

EDITED BY A. H. CURRIER.

A valuable and instructive feature of our Poultry Department is "Questions and Answers." Any of our subscribers desiring advice or information upon any matter pertaining to poultry raising will please address Poultry Editor, The Live Stock and Dairy Journal, Sacramento, Cal., and answers will be printed in this department.

The Question of CHICKENS

That's the problem. But it is solved if you will use

Coulson's Chick Food

It is the poultryman's money maker—the great body builder for the little fellows.

Don't be fooled in the purchase of Chick Food. Get the best. Use Coulson's Chick Food and the season will be a success.

Our new catalogue, "Poultry Feeding for Profit," will be sent free on request. Better get a copy.

Coulson Poultry and Stock Food Company

Petaluma :: California

Which do you consider the better incubator—hot air or hot water? What size of machine works best?—L. H., Oroville.

Answer—The best incubator is the one that will keep the most uniform heat in all parts of the egg chamber. Test your machines with four thermometers, and if back, front and both ends are not practically the same temperature there is something wrong. I have tested machines and found end next the lamp at 106, middle 103 and further end only 100, and these parties were wondering why they had such poor hatches. Personally I prefer the hot water incubators, as I think changes of outside temperature or lamp going out, the heat is better retained. But I have made good hatches with both kinds when eggs and conditions were right, and have seen dismal failures with both under some conditions.

Second—As to size, use as large a machine as you can fill with fresh laid eggs at one time. Eggs at different stages of incubation do not do well together. Eggs should be from mature, vigorous stock, and not more than ten days old for best results. The large hatcheries in this section successfully use machines with capacity of 500 to 2000 eggs each. More depends on the quality of eggs and care given than size of incubator.

What are the Jubilee Orpingtons?—D. M. S., Dixon, Cal.

Answer—They are a handsome variety of Orpington, brought out in England about the time of Queen Victoria's Diamond Jubilee, or seventy-fifth anniversary, some years ago. The plumage is a dark brown, speckled with white, similar to the English Speckled Sussex fowls. They are much admired in England, but few have been imported here. Mr. E. J. Hall, 523 Mission Street, San Francisco, one of our advertisers, imported six birds last spring from St. Paul Cray, Kent, England, and is highly gratified with them. They have the valuable utility qualities of their popular cousins and no doubt will attract fanciers.

The attention of farmers is called to the fact that the State Board of Health will hereafter vigorously prosecute any and all persons or firms who sell, or offer for sale, any poultry that is afflicted with roup, pox, swell-head or any other disease whatsoever. Dealers are forbidden to accept or have on hand any such, and farmers should not lay themselves liable by taking them to market.

RIVERCLIFF FARM.

One of the newer poultry breeders of the State, who is making good, is Miss Sara Lawson, owner of Rivercliff Farm, in Sacramento County.

Miss Lawson went into the chicken business with a very limited knowledge of poultry matters, but with determination to meet every problem as it presented itself, and thereby gain through practical experience a knowledge that would enable her to take her place among successful breeders of poultry in California.

The end of the first year finds Miss Lawson with a wealth of enthusiasm and with a foundation flock of fowls that show a great deal of quality. She has overcome numerous problems during that time, and, putting into practice many ideas that she has acquired through reading on poultry subjects, and some original ideas, she now seems in a fair way of realizing her ambition.

Miss Lawson is a fancier of Orpingtons, and is confining her efforts to the buff and white varieties. She made her start by obtaining eggs from the very best strains. She was somewhat unfortunate in her hatching operations, but those that did hatch were vigorous, strong chicks, and a very large percentage of them have been raised.

The Buff Orpingtons are of the Bell, the Sullivan and Saunders strains, with which all poultry fanciers are familiar. The Bell strain is a product of England, and has a world-wide name. At present Miss Lawson has about one hundred Buff pullets and some very choice cockerels. In the flock are many birds of remarkably even color. The pullets began laying in September, at five months, and have been laying ever since.

The White Orpingtons at Rivercliff Farm are of the famous Kellerstrass strain, and the few that are there have splendid points and show a marked tendency for early development.

Conditions at Rivercliff Farm are ideal for poultry keeping. The soil is loose and well drained, and the orange grove in which the poultry yards are laid out gives plenty of protection from heat during the summer. The feeding, roosting, laying houses and breeding pens are constructed along modern lines. Plans at present are for a capacity of 500 pullets.

WHY NO PHEASANTS?

Visiting the office of the Fish and Game Commission in the Balboa building the other day, I was shown a table upon which were piled high hundreds of letters of application for pheasants from the state game farm. It seems that the pheasant raising industry is one of the greatest fads of the day in California. People all over the State are going in for it. At the present time the Commission is so overwhelmed with applications for the birds that it is compelled to apportion the applications granted by counties and population. But in the meantime, nobody seems able to get a pheasant for his table. Certainly there is a great market for these fine table birds, but what becomes of those reared in captivity? Why are there none in the market. The State is spending money to get these birds and is selling them at high figures to breeders. Where does the public come in?—San Francisco News Letter.

CARROTS FOR STOCK FOOD

No root is more relished by domestic animals than carrots. Weight for weight, they are somewhat less nutritious than potatoes, but the greater yield more than makes up the difference in quality. Horses are especially fond of carrots, and when not working hard should have carrots as a part of their ration. They keep up their condition and give them a fine glossy coat. When fed to cows they somewhat increase the richness of milk, and are thought by some to give a richer color to butter. They are also a valuable food for sheep and lambs.

The International Harvester Company of America has issued a splendid almanac for 1912, and also some very handsome calendars. The almanac will be sent to any farmer who will address the advertising department of the company at Harvester Building, Chicago.

C. E. Nichols of Modesto has purchased the business of the Prize Poultry and Stock Food Company and will conduct the business on a larger scale than it has been conducted heretofore. Modesto is becoming quite a poultry center.

A man doesn't need a big lot of money to build up a profitable poultry business. But he does need a lot of patience and perseverance mixed with an ardent desire to get hen understanding.

Stocks of storage eggs are much lighter than at this time last year. Those who stored the 1911 crop had in mind the tremendous losses from the previous year's business and didn't put away so many.

Sacramento Valley Electric Route

Sacramento
Marysville



Oroville
Chico

NORTHBOUND

No.	Leave Sac'to, 8th and J Sts.	Leave Marysville	Arrive Oroville	Arrive Chico
4	7:45 a	9:09 a	10:31 a	10:50 a
6	9:45 a	11:09 a	12:30 p	12:45 p
8	11:45 a	1:09 p	2:29 p	2:45 p
10	2:00 p	3:24 p	4:44 p	5:00 p
12	4:00 p	5:24 p	6:44 p	7:00 p
14	6:15 p	7:34 p	8:45 p	9:00 p
16	8:45 p	9:58 p	11:12 p	11:30 p

SOUTHBOUND

No.	Leave Chico	Leave Oroville	Leave Marysville	Arrive Sac'to, 8th and J Sts.
1	6:30 a	6:45 a	8:10 a	9:30 a
3	8:30 a	8:47 a	10:12 a	11:30 a
5	10:30 a	10:47 a	12:12 p	1:30 p
7	1:30 p	1:45 p	3:11 p	4:30 p
9	3:45 p	4:00 p	5:23 p	6:40 p
11	5:45 p	6:00 p	7:21 p	8:35 p
13	8:30 p	8:45 p	10:04 p	11:15 p

Connection at Chico with trains to and from Hamilton.

Connection at Sacramento with California Transportation Co. steamers between Sacramento and San Francisco, also with Central California Traction Co. trains between Sacramento, Lodi and Stockton.

S. W. RUSSELL,
General Passenger Agent
Sacramento Cal.

DEPOT 8TH AND J STS.

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POULTRY DEPARTMENT.

S. C. W. Leghorns

Eggs for hatching and Day Old Chicks. Heavy laying strain.

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The revised edition of "The Standard of Perfection" was edited by the American Poultry Association, and is the authority on the required characteristics of all breeds of chickens, ducks, turkeys and geese. The 1910-1915 edition which we offer for sale contains large full page illustrations of both male and female of 44 popular varieties of fowls; also the qualification of each variety. Get the "Standard of Perfection" and select your fowls intelligently. Price \$1.50 postpaid.

THE LIVE STOCK AND DAIRY JOURNAL,

Sacramento, Cal.



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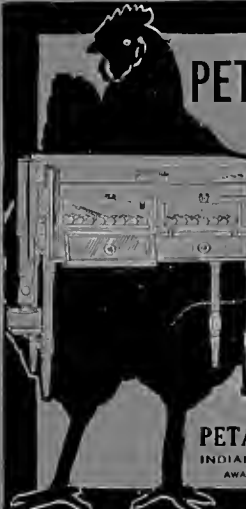
It is now in its 42d volume, and is getting better with each issue. It is the only poultry journal that has the different Standard breeds of poultry illustrated in colors on its front cover each month.

It tells how to breed and raise better birds, how to prevent diseases among your flock, and how to cure the ailments of your birds. It aids you in every way. Tells you how to construct poultry houses, how to run incubators to get the best results, and how to raise little chicks after they are hatched.

Dr. Prince T. Woods, one of the best authorities on poultry, writes exclusively for American Poultry Journal, and conducts the "Question and Answer Department," "Poultryman's Calendar" and various other departments. He also writes some striking editorials each month. The "Home and the Table" and "Woman's Success With Poultry" departments are conducted by Mrs. Helen T. Woods, and prove exceptionally interesting to every woman who wishes to attain success as a good cook or in the poultry business.

Address your order to The Live Stock and Dairy Journal, and thus get the benefit of the following special club price

AMERICAN POULTRY JOURNAL AND THE LIVE STOCK AND DAIRY JOURNAL, BOTH ONE YEAR, ONLY \$1.00



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of lat. Models are a revelation in incubator construction. Admittedly in advance of all ideas, theories and methods. **THE SURPRISE of the TIMES.** The greatest invention since artificial incubation was first introduced by us, yet a marvel of simplicity.

There are so many good things about them you must see the incubator to appreciate it.

The "BIG HATCHERIES" use them. Persons ordering day old chicks from the Hatcheries are sure to have these chicks must be hatched in Petaluma Incubator.

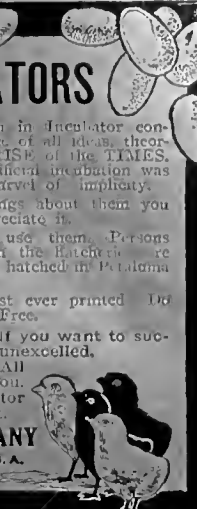
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It is the incubator for you if you want to succeed. Petaluma Brooders are unexcelled.

Free Booklet, "How It All Came About" will interest you. Tells who is the oldest incubator Manufacturer. We pay freight.

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THE LIVE STOCK and DAIRY JOURNAL

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

MARCH, 1912



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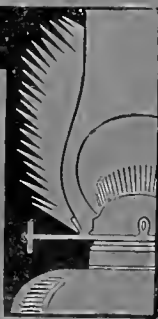
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THE LIVE STOCK and DAIRY JOURNAL

The Big Live Stock
Dairy and Poultry
Magazine of the
Pacific Coast
Established 1901

Volume 11

SACRAMENTO, MARCH, 1912

Number 3

Corn Silage Practical and Profitable in California

(By John H. Guill, Jr., Chico, Cal.)

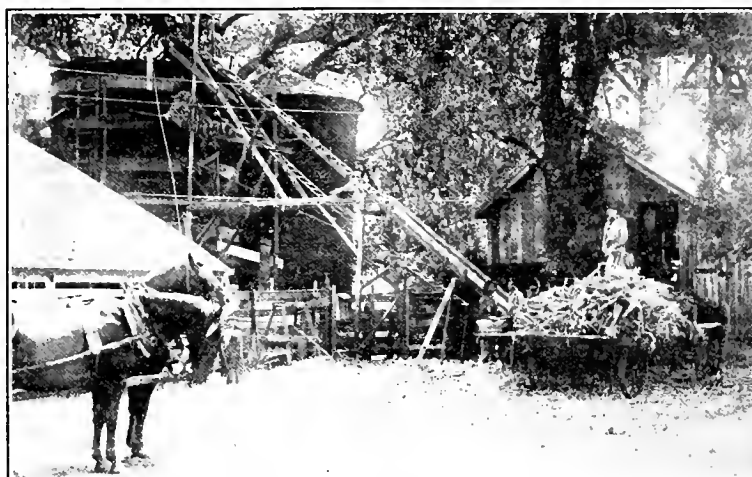


We have three stave silos on the Locust Grove Farm. Two are sixteen feet in diameter, twenty-four feet high, and the other is twelve feet in diameter, twenty feet high. Since the year 1900 we have put up at least one hundred tons of corn silage each year, and several years more than two hundred tons.

The advantage of having silos for the storage of finely cut green corn lies in the fact that a great tonnage of corn fodder can be raised on an acre, and that this crop is very compactly and cheaply stored in silos. Eight to sixteen tons of corn fodder can be raised on an acre of good land, and a silo 16x24 feet will hold practically one hundred tons. With a good crop and good machinery silage can be made at a cost approximating \$1 per ton. Silos further preserve the natural juices and succulence of corn, making the silage a palatable, laxative and healthful food.

Corn silage, when used with alfalfa hay, forms a balanced feed for dairy cows. Alfalfa furnishes an abundant protein supply, while corn furnishes carbohydrates and fat. For several years these two feeds have constituted practically the whole ration which our dairy cows have received.

We use Leaming's Yellow Dent corn, and plant early in April, with a corn planter. This is one of the best special purpose machines that we have on our ranch, as it does far better work and does it much faster than any method of hand planting. After the seed is in



Filling Silos on Guill Ranch at Chico, Cal.

the ground we use a peg-tooth harrow to keep the ground in good shape, and it is used until the plants are six or seven inches high. During the later cultivations the teeth are slanted backward. Any kind of cultivators can be made to do good work, but we have a two-horse riding spring-tooth cultivator which we like very well. The main thing is to get a good seed bed, use good seed, then cultivate often enough to keep the weeds down and the moisture up.

Our crop is usually ready to harvest by August 1st, at which time the grain is just past the roasting ear stage, and the plant contains the maximum amount of feed units. We cut the corn with a binder, and cut only enough at

a time to keep ahead of the wagons, so as to get it to the cutter before it has wilted, for it handles easier and cuts with less power while the stalks are green and fresh.

The cutter is a twelve-inch Ohio, with blower attachment, and we run it with a 7½-horsepower electric motor. With this power no engineer is required, so we can operate with a smaller crew. When we use two wagons only five men are required—one on the binder and two on each wagon. These wagons go to the field and return together. Then two men feed the cutter, one unloads and the other spreads the silage. The silage should be kept higher and tramped well around the edges. It will pack

itself in the center. Five men are able to put up about twenty tons per day.

Feeding is begun at once, the silage being fed in the dairy barn, where it has the added value of being an incentive for the cows to be on hand for milking.

Should the corn happen to be over-ripe or too dry we sprinkle it freely with water.

This dry climate operates against perfect silage to some extent. In the first place a wooden silo will shrink very much, and it is difficult to tighten it properly. It should be tight, for silage spoils when exposed to air. The corn in the field, too, may suffer from the hot north winds of July. And if a second silo is filled two or three feet on the top will spoil. In the East they claim that only six or eight inches will spoil, for in their damp climate the top will mold and exclude the air from the lower layers. But here our July and August air is so dry that it is impossible for the topmost layer to mold and we necessarily lose more.

Regardless of these drawbacks we find that the silos are profitable, and the silage helps out wonderfully during the fall and winter when there is but little or no pasture.

Cement silos should prove to be better than stave ones for this climate, for they would not shrink or swell. Silage is taken from the top always, and as about four inches must be used every day to prevent spoiling, the diameter is determined by the amount that can be fed each day. A silo that has a good height is best, for the silage will become firmly packed by its own weight.

Good Work of California State Dairy Bureau

(By Charles Hughes.)

The enforcement of any new law which directly affects a great number of individuals is a task requiring a vast amount of patience and tact. To conscientiously enforce such a law where conditions preceding its enactment have been such that practices in violation of it were not considered as anything more than customary business practice established by long usage, and to accomplish such enforcement with a small residue of ill-feeling requires still greater patience and tact.

Operating upon its present lines the California State Dairy Bureau is conscientiously going its way, educating,

advising, and prosecuting only when such course is plainly demanded in the proper discharge of its functions.

It is safe to say that by far the larger percentage of violations of the California state dairy laws come about through lack of knowledge of the law on the part of dairymen. The smaller percentage of violations is made up of those who wilfully violate the law or are careless of laws known to exist.

Among wilful violators are found the rather small percentage of dairymen who water their milk or skim it and then sell their product as whole milk.

The ranks of the careless violators

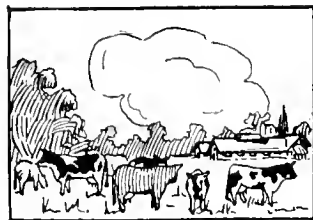
are composed of the dairymen who neglect sanitary conditions about their barns and herds. In correcting these conditions to make them conform to the law the work of the State Dairy Bureau is largely educational, and it is meeting with the hearty co-operation of dairymen and health officers in practically every section of the State. Several counties and one city have gone so far as to provide dairy inspectors at their own expense, and one of the duties of such inspectors is to report in detail the results of their inspections to the Bureau. Tulare County has two such inspectors, Kings County one, Imperial County one and the city of San Diego one.

In most of the counties and cities of the State the local health officers

have voluntarily co-operated with the Bureau in an earnest effort to effectually bring dairy conditions up to the required standard. It is, no doubt, true that now and then conditions are encountered by a local health officer which present awkward complications in the impartial enforcement of the law, and in such cases co-operation with the state organization is an effective solution of the problem.

Under the efficient direction of Secretary Andreasen the Bureau has recently done good work in correcting conditions existing in violation of the law in San Joaquin and Sacramento Counties.

In San Joaquin County the Bureau worked in harmony with County Health Officer Friedberger and Dr. (Continued on page 8.)



THE DAIRY



Raising Dairy Calves on High-Priced Feed

(By J. I. Thompson.)

The prospects of a dry year, and the present high prices of feeding stuffs, are causing dairymen to do some hard thinking. Can a calf be profitably grown to producing age at the present prices of milk and grain? Or, would it be more profitable to feed the calves heavily for a short time and sell them for veal?

So far as the writer can ascertain there is no law in this State which compels breeders to keep calves to any certain age before sending them to the shambles. However, it is well known that a calf should be six weeks old before it makes the best veal. It is just as well known that a full milk ration without any grain produces the highest priced veal. What the dairyman wishes to know today, is whether or not he can afford to grow his calves in this manner.

A calf will consume an average of twenty-four pounds of whole milk per day for six weeks, or a total of one thousand pounds in that time. He will probably gain one pound for about every ten pounds of milk consumed. Therefore, he should gain about one hundred pounds during the six weeks. An average calf would weigh eighty-five pounds at birth, and if he gained one hundred pounds in the six following weeks, should weigh 185 pounds. This 185-pound veal calf at 6 cents per pound would bring \$11.10. If the milk contained 3.5 per cent fat this would be slightly less than 32 cents per pound for the fat, allowing nothing for the skim milk.

This would indicate that there is no profit to be derived from feeding whole milk to a calf at the present prices. Should the market for veal be less than 6 cents and the butter-fat higher than 32 cents a loss would be incurred.

It seems absolutely imperative at the present prices to use skim milk instead of whole milk after the first week in order to come out even.

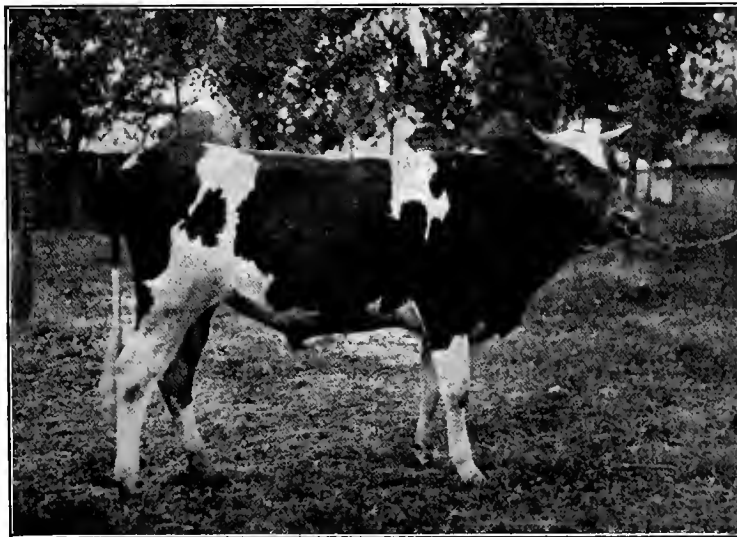
It is possible to feed some grain and produce a fair quality of veal. Rolled oats have given as uniformly desirable results as any other substitute that is readily available, supplemented after a time with some other grain. The same system may be used for producing calves intended for breeding purposes where milk is sold by the quart. It is advisable to feed whole milk for the first week and about ten pounds per day is necessary. The milk may be reduced two pounds the second week and $\frac{1}{4}$ of a pound of rolled oats substituted, and the process continued for the third, fourth and fifth weeks of reducing the milk two pounds and increasing the rolled oats $\frac{1}{4}$ of a pound. After that skimmed milk can be substituted for the whole milk and the rolled oats supplemented by as much other grain as the calf will clean up. This grain can be a mixture of

equal parts rolled barley, linseed oil meal and bran. This method would necessitate about \$3.50 worth of whole milk, and will help to reduce the cost of a calf at the present prices of that commodity. About seventy pounds of rolled oats and ten pounds of the grain mixture would be required up to the time the calf is three months' old. Such a method will not produce so satisfactory veal as an entire milk ration, but has been proven fairly satisfactory for growing calves for dairy purposes.

To grow a dairy calf from birth to

ence in their success is probably due to the methods which they follow. Some let the calves remain with the cows for the first two or three days, while others never allow them to nurse the dam at all.

Regardless of which method is preferred, the calf should be given a good start. After that the success will usually be measured by the ability of the feeder to prevent scours. Overfeeding is probably the most common cause of this trouble, but other factors are often as important. Prevention is the best remedy. To do this the quarters should be clean, well bedded, light and well ventilated. Allow plenty of exercise in the sunshine. Feed regularly and from clean pails. Feed milk always at the same temperature, the



Mable's Joaquin of Palmhurst. Purebred Guernsey Bull, Owned by George T. Farmer, Hanford, Cal.

maturity will require on an average 450 pounds of whole milk, 4300 pounds skim milk, 100 pounds hay, 1500 pounds silage or roots and 900 pounds of grain. This fed with the pasture that is generally available should be sufficient to bring a heifer to 26 or 27 months of age in good, vigorous condition. At the present prices of feed-stuffs this amount, not including pasture would be worth about \$45. Counting the work, unless something is credited to the heifer for the manure, there is little profit in sight for the producer of ordinary dairy heifers at present prices. It would seem, under existing conditions, that the man who is producing purebreds will reap the lion's share of the gains. Purebred heifers of any of the four established dairy breeds are selling for more than double the price of the ordinary grades, but the milk and grain consumed by them is not worth any more on the market than that consumed by their non-pedigreed neighbors.

Breeders showing equal ability in many lines of their work often vary enormously in their ability to raise calves by hand. Much of the differ-

ence in their success is probably due to the methods which they follow. Some let the calves remain with the cows for the first two or three days, while others never allow them to nurse the dam at all.

Regardless of which method is preferred, the calf should be given a good start. After that the success will usually be measured by the ability of the feeder to prevent scours. Overfeeding is probably the most common cause of this trouble, but other factors are often as important. Prevention is the best remedy. To do this the quarters should be clean, well bedded, light and well ventilated. Allow plenty of exercise in the sunshine. Feed regularly and from clean pails. Feed milk always at the same temperature, the

neener 85 degrees the better. The foam that accumulates on the milk while being separated should not be fed. Cold rains are very liable to cause indigestion and scours. As a further prevention a tablespoonful of blood meal added to each feed of milk will be found very beneficial. Then if grain is fed immediately after the milk, calves will not often suck each other's ears. This sucking allows air to enter the stomach, causing bloat, indigestion and scours.

After weaning nothing is more desirable than good pasture whenever it is available. A variety of grain, some alfalfa hay and silage or roots, if available, will keep the heifer growing at other times. If she is large and growthy, she may be bred at 15 months' of age. If she is only medium in size or rather small it is advisable to not breed her until about 18 months old, so that she will calve when about 2 years and 3 months old.

Holsteins from the East

The Live Stock and Dairy Journal—Having recently returned from the East with a shipment of eighty-two purebred Holsteins, some information as to the class of stock included in the purchase may be of interest to the dairymen and breeders of California.

We believe this to be the largest consignment of its quality ever brought to the coast. By the introduction of this class of cattle, the dairy industry of California is receiving a great boost, and it is to be hoped that our State will soon breed enough, not only for its own demands, but to supply the constant inquiries from Mexico, South America, New Zealand and the Orient.

With our rich soil, irrigation and climatic conditions it is but a matter of a few years until the great valleys of California will be classed among the greatest breeding centers of the world. One needs only to visit the breeding farms of the East to fully appreciate our natural advantages. They are obliged to stable their cattle from six to seven months during the year, and after feeding a great variety of high-priced concentrates throughout the year, they are unable to produce as growthy and hardy an animal as can be grown in California on alfalfa alone.

Our State has been termed the "Holland of America," as it approaches more nearly the native home of the Holstein-Friesian cow than any other country. After leaving the frozen East, where the temperature ranged from zero to 35 degrees below, and crossing the barren plains of New Mexico and Arizona, we entered Southern California. As we awakened on the morning of February 6th, in the midst of the beautiful San Joaquin Valley and beheld the green alfalfa fields dotted with dairy cattle as sleek and content as in the midst of spring, one of our party, who hailed from northern Minnesota, was heard to remark: "This is surely cow heaven."

Our cattle were selected from the oldest and best herds in Minnesota, Iowa and New York. From J. B. Irwin's herd in Minnesota were selected several sisters to his noted cow, Pieterterje Maid Ormsby, that holds the world's official thirty-day butter record, 145.66 pounds. Also ten sisters to our cow, Riverside Sadie De Kol Burke, that holds the milk and butter record for California, 25,981.8 pounds of milk and 784.13 pounds of butter-fat equal to 980.16 pounds of churned butter. These heifers are in calf to the sire of Pieterterje Maid Ormsby. There are also a number of grand-daughters of De Kol 2d's Butter Boy 3d from the Irwin herd, two of which were winners this year at the National Dairy Show.

From the herd of Stevens Brothers Company, Liverpool, are the following heifers: Dilly Prilly 2d, the dam of which made the world's record with first calf at 2 years 3 months of age, producing in seven days 23.01 pounds of butter and 751.82 pounds in one

Give your horses, cattle and sheep salt frequently. It is nature's appetizer and disease preventative.

Dairy Cows For Sale

Free from tuberculosis. Official test certificate with each cow.

I sell these cows singly or in car lots.

C. P. STANBROUGH, D. V. S.,
Patterson, - - - California.

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Young Bulls and Bull Calves. All well bred and most reasonably priced. Write or call on us. Immediate delivery.

STEVENSON & WAGNER,
Newman, - - - California.

J. H. HARLAN CO.

WOODLAND, CAL.

HOLSTEINS

Nothing to sell now, but we are looking orders for calves for future delivery.

2--HOLSTEINS--2

We offer two fine Bull Calves, born last October from A. R. O. dams averaging 3.7% fat. Calf's full sister A. R. O. at 3.8% fat average.

Bargains at bargain prices.

LINWOOD FARM,
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HOLSTEIN CATTLE
The Greatest Dairy Breed
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HUMBOLDT COUNTY CALIFORNIA

SHORTHORNS**20 Head of Service Bulls For Sale**

MILK STRAIN

Attention Dairymen!

I am breeding the finest stock in the West. Young bulls for sale—all pure-breds. Write for prices and pedigrees.

JOHN LYNCH,
Petaluma, Cal.

Holstein-Friesian Cattle

A Few Choice Registered Bulls and
25 Choice Registered Heifers.

Prices on Application.

CHAS. JAY WELCH, Los Banos, Cal.

year; May Korndyke 2d, the dam of which is the youngest cow in the world to make 30 pounds of butter in seven days; Charlotte Walker 2d, her dam making in seven days, at 2 years and 2 months of age, 21.42 pounds butter, and in one year 16,000.8 pounds milk and 703.99 pounds butter. These heifers are in calf to King of the Pontiacs, the daughters of which hold more world's records than the daughters of any other bull of the breed.

From the celebrated Moyerdale herd, Syracuse, N. Y., we have three daughters of King Walker. One of these, Prilly Princess Walker, made a seven-day record just before starting to California, producing 25.40 pounds of butter at 2 years and 9 months of age. Her dam is Prilly Princess, a daughter of Prilly, the greatest producing cow of the breed. Blanche Walker, over 20 pounds of butter in seven days at 2 years and 7 months. Her dam is a daughter of Blanche Lyons Netherland, with the great record of 34.36 pounds of butter in seven days, and 140.17 pounds in thirty days.

From the herd of McKay Brothers, Buckingham, Ia., we have selected several daughters of Korndyke Queen De Kol's Prince, the sire of four daughters that average 30.22 pounds butter in seven days, and one that made an official record of 1090 pounds of butter in one year. Among the lot is a number of cows bred to this noted sire.

There are others in the shipment closely related to Pontiac Clothilde De Kol 2d, that has recently made the world's yearly butter record, by producing 1017.28 pounds of butter-fat, equivalent to 1271.6 pounds of butter, 80 per cent fat.

By the addition of this selection to the herd we have already established, we believe, gives us a herd second to none on the Pacific Coast.

A. W. MORRIS & SONS,
Woodland, Cal.

AMONG THE JERSEY BREEDERS

J. G. Stahl of Bakersfield was a visitor at the N. H. Locke ranch, in San Joaquin County, February 4th. Mr. Locke showed his string from A to Z, and was especially pleased to show the get of Kings Valet.

Guy H. Miller of Stanislaus County reports the splendid work of a heifer with first calf, Goldie of Venadera, 26 months old, that has milked as high as 38 pounds a day.

Charles N. O'Dell of Stanislaus County promises to bring out some show stuff for the State Fair of 1912. His motto is "Utility and Beauty."

From word that is being passed along, there are prospects this year for the greatest Jersey show the State Fair has ever had, and the Directors of the Agricultural Society have promised to treat us right this year.

J. E. THORP,
San Joaquin County, Cal.

WILL RETURN WITH HOLSTEINS

Dr. E. J. Weldon of Sacramento left for the East on February 15th. He will bring back with him about thirty-five head of the best purebred Holsteins he can find. This stock will be put on Diepenbrock Ranch, near Sacramento, and is the beginning of a big, up-to-date purebred Holstein establishment.

**ONE GOOD FEATURE
OR
EVERY FEATURE GOOD
WHICH?**

As long as a cream separator skims close, it is a good investment. But one good feature or a few good features do not make a separator that will skim close for any length of time.

A good separator is one in which the minor parts have been just as carefully designed and just as well made as the most important parts. A defect in a minor part will, by throwing the entire machine out of adjustment, offset all the perfection attained in any other part of the machine. In the

I H C Cream Harvesters
Dairymaid and Bluebell

one feature does not overtop all others because the same I H C standard of quality in design, material, and workmanship is maintained throughout.

They are the only separators with dust-proof and milk-proof gears which are easily accessible. The frame is entirely protected from wear by phosphor bronze bushings. These separators have large shafts, bushings, and bearings; the flexible top-bearing is the strongest and most effective found in any separator. The patented dirt-arrester removes the finest particles of dirt from the milk before the milk is separated. I H C Cream Harvesters are made in two styles—Dairymaid, chain drive, and Bluebell, gear drive—each in four sizes.

The I H C local dealer will be glad to let you examine one of these separators, or, write nearest branch house for catalogues and other information.

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The Bureau is a clearing house for Agricultural data. It aims to learn the best ways of doing things on the farm, and then distribute the information. Your individual experience may help others. Send your problems to the I H C Service Bureau.

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AYRSHIRES

Best blood in the West. Bulls, cows, heifers and calves. Our service bulls were sired by Grand Champions. Write for pedigrees and prices.

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Milk Strain Shorthorns

I offer for sale a number of Registered Bulls of the best breeding, fit for immediate service. Also a carload of High-Grade Cows. Write me for particulars and prices.

A. BALFOUR
350 CALIFORNIA STREET, - - - SAN FRANCISCO.

Attention Breeders and Dairymen!

Are you in need of a herd sire? We are offering the choicest lot of

HOLSTEIN-FRIESIAN BULLS

ever offered in the State. Several Eastern bulls sired by Korndyke Queen De Kol's Prince, the sire of four daughters that average 30.22 pounds of butter in 7 days, and one with 1090 pounds of butter in one year. Also have a few bull calves by our herd sire, King Segis Pontiac Emperor, who is a grandson of Pontiac Clothilde De Kol 2d, and his dam a full sister to King of the Pontiacs. Will have some cows and heifers for sale later.

A. W. MORRIS & SONS
WOODLAND, CAL.

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149 California Street,

San Francisco.

Important Things in Successful Dairying

At the recent meeting of the Oregon State Dairy Convention, L. E. Warner, one of the most successful dairymen of Douglass County, Wash., read a most interesting and instructive paper on "What I Consider the Most Important Things in Successful Dairying."

"Mr. Warner started dairying in 1903 with one Jersey bull, four mature cows, three 2-year-old heifers and three yearling heifers. His knowledge of dairying was extremely limited, and the result of his first year's work was an average of 105 pounds of butter-fat, or \$21.70, per cow. What Mr. Warner has learned and accomplished since that time is best told in his own words, as follows:

"I became convinced that cheat hay and ground barley did not form a balanced ration, and in order to assist me in formulating a balanced ration for my cows all the year round I must build a silo. Right here I wish to state that I am of the opinion that good silage for both winter and summer feeding is as necessary for dairying as the cows themselves, consequently I set about in the spring of 1904 to build me two silos, and filled them that fall with corn and began feeding from them that winter.

"Silage in winter is a necessary succulent feed, and in summer when the dry season sets in, silage is the best and cheapest feed to help out short pasturage.

"With the equipment I have at present, and with a force of six men and three teams, I can fill my two silos in two days. One man and team to run the corn binder, two men and teams to haul the corn, one man to pitch bundles, one man in the silo and one man to feed the cutter. I paid \$3 per day for man and team and \$1.50 per day for the other men, including board. As my son and myself made two of the crew, and allowing ourselves the same wages, the cost would be \$27, and allowing \$10 for board, it would amount to \$37.

"The capacity of my two silos is 60 tons, but after it settles there will be about 50 tons, bringing the cost per ton to 75 cents. This does not include the use of my machinery.

"From the first of November to the middle of April I have no pasture for my cows. They are fed entirely in the barn.

"Another important thing in dairying which I did not start doing until 1904, is weighing the milk. I started to weigh the milk once each month for three consecutive days and sent a composite sample to the creamery for testing. I found this unsatisfactory for various reasons. So in the winter of 1905 I decided to do my own testing, and, therefore, got me Farrington & Wool's book on 'Testing Milk and Its Products.' Soon after I bought a Babcock milk tester, and very soon discovered which were my poorest and which were my best cows. From that date I decided to keep an individual record of each of my cows, and purchased a Maloney milk scale, and it may surprise some of you if I tell you that it never required more than one and one-half minutes to weigh the milk of my fifteen cows. By the results thus obtained in weighing and testing my milk I would consider it cheap if it consumed hours instead of minutes. As a result of the system thus applied

I found that in the year 1904 my herd averaged me 110 pounds of butter-fat per cow, only a little better than the first year. But in 1905 they averaged 217 pounds; in 1906, 237 pounds; in 1907, 276 pounds; in 1908, 287 pounds; in 1909, 329 pounds, and in 1910, 333 pounds, or \$121.46 worth of cream per cow, instead of \$21.70, as in the beginning.

"This weighing and testing started me on an improved method of feeding, and I became thoroughly interested in my dairying project because I realized more than ever that dairying can never be a side issue and spell success.

"The standard I set for my cows in 1905 was 300 pounds of butter-fat per cow, and it kept me hustling to keep ahead of my cows.

"My experience has made me come to the conclusion that there are many cows rated as poor, which, if they received systematic feeding and care, would be good cows. I myself had two cows in 1903 which rated poor, giving not more than 105 pounds of butter-fat per cow. The records of these same cows for 1907 shows 515 pounds of butter-fat to their credit. One gave 244 pounds, the other 271 pounds, and coming within 222 pounds of producing as much as the seven cows in 1903.

"In 1905 I purchased my first registered Jersey bull from the Agricultural College, and found that there was a marked improvement in his heifers over those of my former herd.

"In 1906 I came to the conclusion that I must have alfalfa hay to be fed together with corn silage to form the foundation of a good and cheap ration. I have demonstrated to my entire satisfaction that alfalfa can be raised in the Yoncalla Valley without irrigation, for I have three and one-half acres of as good alfalfa as can be produced anywhere. Within the very near future alfalfa hay and corn silage will constitute my principal feed.

"In conclusion I will say that I consider better breeding, better feeding and good weeding the true elements of success in dairying, with abundance of kindness to the good cow and a wee bit of common sense."

SPLENDID HERD FOUNDATION.

The Live Stock and Dairy Journal—I came here a year ago and have about 75 acres of alfalfa land in the Orland-U. S. Government Irrigation Project, about 60 acres of which are leveled and seeded, and most of it is in good shape for next season. I cut about three tons to the acre last year—sowed last spring. I decided to feed my hay, so sent to Fort Calhoun, Neb., and bought twenty-one sows and two boars—purebred Poland Chinas—from Lyman Peck, owner of Big Mischief II, the only boar that ever won the junior championship and then won the senior championship the next year at the Nebraska state fair. Five of my sows had pigs, sired by him, last fall, and they are a fine looking bunch. I then bred all the sows to Sampson's Rival, the largest boar purchased from Mr. Peck, and one that he had used on some of his own herd, and I now have quite a bunch of little spring pigs. The pigs are fine little fellows, and

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The Most Important Cream Separator Improvement Since the Introduction of the Present Type of De Laval Machines.

The new automatically oiled De Laval Cream Separators are now being supplied in all sizes, and this improvement constitutes another great step forward in cream separator construction—the one thing possible in betterment of the previous De Laval machines of the present type.

The new system of De Laval automatic oiling is distinctively different from any other splash or spray system in that there is a constant regulated feed of fresh oil and discharge of used oil. Other splash systems use the same oil over and over, until it soon does more harm than good.

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De Laval agents will be glad to exhibit the new machines and demonstrate the working of the new automatic oiling system, which more than ever enhances De Laval superiority in every feature of cream separator practicability.

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You can make big money making wells. This is one of the few lines of work that are not over crowded. The demand for wells is far greater than can be supplied by the machines now at work. Well Drillers command their own prices. We build the celebrated HOWELL line of Well Machinery, for making deep or shallow wells of all sizes, for all purposes and in all kinds of ground. Our machines have all the latest improvements, do perfect work, are easily operated and are very FAST WORKERS. Write today for our free Catalog.

R. R. HOWELL & CO., Los Angeles, Cal.
Main Office and Works, Minneapolis, Minn.

the old hogs are as good as any I have seen in this country.

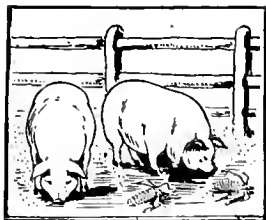
After getting the hogs I bought twenty-one Holstein cows, two of which are registered, and a registered Holstein bull. These are all high-grade stock, and with the registered cows and hull I can build up a herd of purebreds in a few years that will be in keeping with the hogs. I don't believe in having poor stock on the ranch, and any that don't pay will be fattened and sold to the butcher and good ones put in their places.

I have started in a small way, but hope I can enlarge in the future. Stock raising is a great business, and I believe more people ought to go into it, especially for purebred stock.

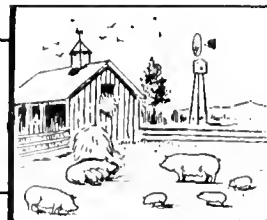
H. F. HARROLD.
Glenn County, Cal.

As the Journal goes to press a meeting is being held in Riverdale, under the auspices of the Riverdale Creamery, for the purpose of establishing a cow testing association in that thriving dairy section. Dr. Leroy Anderson of the State Agricultural College is on the ground, and a full report of the meeting will appear in the April Journal. After Riverdale, Dr. Anderson will proceed to Hanford at the invitation of the Kings County Dairymen's Association, and may also visit Fresno at the invitation of the stockholders of the Danish Creamery at that place.

There is no better general feed than good green grass for growing and producing animals.



THE SWINE HERD



The Feeding and Care of Swine

FAVORS THE O. I. C. BREED.

The Live Stock and Dairy Journal—There are several very important reasons why I favor O. I. C. hogs. I have been interested in pigs for many years past. I do not find as many of the O. I. C. in California as other breeds, but find in latter years that they are taking the place of other breeds. Farmers are commencing to note the easy keeping of these pigs, and that they are ready for market at most any time while growing, and with less feed than any other breed of pigs I am able to find. For example, I have fed three hogs of different breeds, and find the O. I. C. in shape for market thirty days ahead of the others and 22½ pounds better. Also the O. I. C. required much less feed while fattening. In a great many butcher shops I find they prefer the white hog because it has a little more desirable meat on it for the customer, while the packers pay just the same as for any other pig. I also find that they are not such a dirty hog, for they prefer a clean place if they can get it.

W. W. HETTMAN,
Stanislaus County, Cal.

PUMPKINS FOR HOGS.

The Live Stock and Dairy Journal—I have been in the hog business here only the past year, but have had fine success feeding Indian corn and sugar pumpkins. My hogs seem to be in perfect health. So far have not had any sick. I butchered nineteen, fed and fattened on corn and pumpkins, and the meat was of fine flavor. The neighbors say it is the best they have tasted since they came to California. I sometimes cook the pumpkins, making a swill which they seem to relish, but they prefer the raw pumpkin to the corn. I expect to add alfalfa to their bill of fare this year. I also feed my cows pumpkins with good results.

Perhaps in another year I will be able to give more information than at present.
F. G. SIMPSON,
Tehama County, Cal.

THE DUROC JERSEY PIG.

All honor be to the little red pig
As he eats and sleeps and grunts and grows;
He grows as he sleeps and will soon be big,
As he lengthens out from his tail to his nose.

You may toil and sweat and shovel and dig,
And your labor a harvest surely reaps;
But you can't compete with the little red pig,
For the little red pig grows while he sleeps.

The beets and barley are fine we know,
And juicy the fresh alfalfa sprigs;
But all these into more money will grow,
If put inside of the little red pigs.

And when the alfalfa will cease to grow
And the green from the garden and field is gone,
And winter comes with its frost and snow,
The little red pig keeps growing on.

And he grows and he grunts and eats and sleeps,
No longer little, but broad and big;
And his master prospers by bounds and leaps—
All honor to the little red pig.

And we view our homes and farms with pride,
With their wealth of barns and mansions big,
And we say in our hearts we are satisfied—
They are monuments to the little Duroc Jersey Pig

—JOHN P. DAGGS.

SOME HOGS AND SOME PEDIGREES

The Live Stock and Dairy Journal—Being one of the younger breeders of Berkshires, we have hesitated about making our debut in the columns of the Journal until we were, as you might say, sure of ground.

Since the first of the year we have sold fifteen head of Berkshires, and are now sold out of everything except what goes in the herd.

We have been making a number of additions to our herd in the last month, among which might be mentioned two choice Double Premier gilts purchased from the Four Oaks Stock Company, Oaks Lady Premier 8th (151796), and Oaks Lady Premier 2d (151745). Both of these gilts are bred to Berry's Combination (156340), the Double Black Robinhood bear of the Four Oaks Stock Farm that they recently brought from the East, and, if we are not mistaken, the prize winner in his class at the next State Fair. Berry's Combination was sired by Robinhood (138569), and he by Baron Compton (89195), the best bear ever imported from England.

We have also purchased from the Four Oaks Stock Company what we believe will be an outstanding individual, a boar pig sired by Holt's Longfellow (146361), and out of Ravenwood Duchess 92d (140527). We believe this will be a case of "some hog as well as some pedigree."

On February 12th, Oaks Lady Premier 2d farrowed nine pigs to Berry Combination, as pretty a litter and as well marked as any we ever saw. Oaks Lady Premier 8th is due soon.

On February 17th Belle Wilts 22d farrowed ten pigs to Four Oaks Premier 2d (146432). These are large, well marked pigs.

All of our young stock is growing nicely, and is in extra good condition. Skim milk is the basis of our feed, and what it lacks in carbohydrates is supplied by corn, barley and middlings. We are busy at present seeding the hog lots to alfalfa, and soon they will have that in addition. As far as is possible, we aim to feed a balanced ration, thus getting a better hog at less expense.

Some other time it might be interesting to other readers to know how well we have succeeded in our system of feeding, and incidentally to know how we came to champion the Berkshire. But enough for this time.

OAK GROVE DAIRY FARM.

By H. G. Armstrong,
Yolo County, Cal.

The two halftone photographs of William Bernstein's Poland Chinas, which we print in this issue, show some good individuals. A Journal representative who recently looked Mr. Bernstein's herd over, found them in prime breeding condition. Look out for the Bernstein Poland Chinas on the Fair circuit this year.

YOU CAN'T AFFORD

TO USE ANYTHING BUT

A PURE-BRED BOAR—

at the HEAD OF YOUR HERD

Because

He is just half the herd, and the increased number of pigs he will get will more than pay his cost. Did you ever

Stop

And consider that with a pure bred boar and ordinary sows you can build up your herd to 300 bloods in less than two years?

Registered Duroc-Jersey Boars---Ready For Service

Of August and September farrow, weighing from 150 to 200 pounds.

\$25 to \$30

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THE BIG WHITE HOG.

Two hundred and fifty to 300 pounds at 8 months. Best and largest herd in the State.

Write us your wants. We can fill them. All our stock is registered.

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MILLS, CAL.

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Best Bred Stock Now in California

YOUNG STOCK AND SERVICE BOARS AND SOWS FOR SALE

All registered pure-breds, and from such sires as Wonder and Klondike. New Importations from Missouri and Indiana. We are located in the Imperial Valley, and are here to supply California, Oregon and Arizona breeders. Write for prices and pedigrees to

MOORE BROS.,

Box 202, El Centro, Imperial Co., Cal.



Silver Boy and Matrons, Owned by William Bernstein, Hanford, Cal.



King Lancaster, Grand Champion Bull State Fair 1909-1910-1911
Only Bull Three Times Champion

FOR SALE 100 SHORT- HORN BULLS

Sired by grandsons
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Hillcrest Herd,
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300 BLACOW-
ROBERTS-
GLIDE

French Merino
RAMS

In Single or Carload
Lots

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ticulars apply to

T. S. GLIDE
Davis, Cal.

Howard Cattle Company

You will soon be needing Bulls.
We have on hand a number of
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Horns.

For prices and particulars apply

Howard Cattle Co., 641 Mission St., San Francisco, Cal.

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HORSES, HOGS, COWS—Sales conducted in all parts of California and adjoining states
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THE LIVE STOCK and DAIRY JOURNAL

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

APRIL, 1912



Representative Body of California Live Stock Breeders at Banquet, Palace Hotel,
San Francisco, March 9, 1912

AGRICULTURAL PUBLISHING COMPANY, SACRAMENTO, CAL.

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The California Branch of the National Purebred Sire League

The Greatest Movement Yet Inaugurated for the Improvement of Livestock on California Farms by Advocating the Use of Purebred Sires

An Opportunity for Breeders and Farmers to Join the Great National Movement for the Elimination of the Grade, Mongrel and Scrub Sire from the Farms of this Country

Every Progressive California Breeder Must Join in this Movement and Consider Himself a Committee of One to Promote the League in His Community

IN LINE WITH my unceasing efforts in behalf of purebred stock in California, I have been authorized to organize the California Branch of the National Purebred Sire League, the greatest movement yet inaugurated for the improvement of the live stock of the country. I have undertaken this important work with a feeling that I shall have the co-operation of every breeder and advocate in California of **BETTER STOCK**, and I shall consider myself well repaid for my efforts through the great good that is bound to result to the cause that **THE LIVE STOCK AND DAIRY JOURNAL** has so persistently advocated.

Branches of the National Purebred Sire League have already been organized in several of the Eastern states, and it will not be long until the League will be represented in every state in the Union. It is readily seen that the League will thus become one of the greatest forces for the uplift of live stock conditions in general that this country has ever seen. It unites the breeders of horses, cattle, swine, sheep and goats into one great organization, which knows no breed, but works for the improvement of **ALL** live stock. It is not intended to supplant any of the live stock, dairy or breeders' associations, but to co-operate with such organizations in every possible way and add strength to the work they are doing. Hundreds of farmers will become members who are not now affiliated with any such organizations. The great benefit that will result for the

GOOD OF THE CAUSE is at once apparent.

Conditions are most opportune at this time for the formation of the **CALIFORNIA BRANCH OF THE NATIONAL PUREBRED SIRE LEAGUE**. Hundreds of new settlers are taking up farm lands in this State, and the great majority of them will be more or less interested in some branch of the live stock industry. Hundreds more are coming here. Now is the

if you will help me in my efforts to improve the live stock on California farms. Every progressive breeder in California is expected to join in this movement and distribute pledge cards in his community. In doing this he will help his own business in addition to boosting the cause of live stock improvement in general. The organization of the **CALIFORNIA BRANCH OF THE NATIONAL PUREBRED SIRE LEAGUE** will

getting them to sign the pledge, which will start them thinking along the right lines, if it does nothing else. Let's make California the greatest live stock State in the Union, as it has the right, by virtue of every natural advantage, to be. Let's show the thousands of people who come here to the great Panama-Pacific Exposition in 1915 that the live stock on California farms is of the high standard that it ought to be.

If you are ready and willing to join in this movement, write me a letter today and tell me so. The dues for the first year are 1 cent, the cost for the postage stamp required to mail the pledge card to the Secretary, so you will not have any trouble on that score. Just get them to sign the pledge—that's the main thing.

ARIZONA AND NEVADA BREEDERS AND FARMERS will be permitted to affiliate with the **CALIFORNIA BRANCH OF THE NATIONAL PUREBRED SIRE LEAGUE** until enough names are obtained in each State to warrant separate organizations, and the same holds true for those of any other States west of the Rocky Mountains where a branch of the **NATIONAL PUREBRED SIRE LEAGUE** has not yet been formed.

Address all communications:

R. D. McFarland

Secretary
Purebred Sire League

Sacramento

California

Editor the Live Stock and
Dairy Journal

The Purebred Sire League Pledge

I hereby pledge myself:

- (1) To use none but a Purebred Sire in the breeding of all farm animals.
- (2) To advocate the general use of Purebred Sires.
- (3) To work for the betterment of Purebred Sires in breed-character, individual excellence, soundness and prepotence.
- (4) To discourage the use of grade, mongrel or scrub sires, and all dams, irrespective of breeding, that are diseased, hereditarily unsound or otherwise unfit in conformation and character.

time to launch this great campaign for **BETTER STOCK**. **THE LIVE STOCK AND DAIRY JOURNAL** has long been carrying on an education campaign in behalf of the more general use of purebred sires, and now I want the help of the breeders and the farmers who believe in the things for which this great National movement advocates.

READ THE PLEDGE printed on this page and then let me know

be the greatest impetus that the purebred stock business has ever received in California, as the thing most necessary is to educate the farmers to the value of the purebred sire. Many men have hesitated going in for raising purebred stock because a great majority of the farmers of the State have been so indifferent regarding the character of stock kept on their farms. Let's get in now and overcome this obstacle by

Who Said Coulson's Special Chick Food?

All its users. They tell the story of a wonderful success—a success that every poultryman can attain. Will you accept our suggestion? Will you try a sack of

Coulson's Special Chick Food

You will be so well pleased that you can never be turned from its use.

Give it a trial. You will find it for sale by all reliable poultry supply houses.

Our booklet, "Poultry Feeding for Profit," will be mailed free upon request. Better write for a copy.

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A. H. CURRIER

SANTA ROSA, CAL.

Official Licensed Judge of American Poultry Association on All Varieties. Show work done. Scoring and mating birds by an experienced breeder.

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HANFORD, CALIFORNIA.

Breeder of Standard-Bred Buff Wyandottes, Barred Rocks and White Leghorns. Eggs, fancy stock, \$3 per 15; Eggs, utility stock, \$1.50 per 15.

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DUX! DUX!

Standard-Bred.

Buff Orpington, White Indian Runner and Fawn and White Indian Runner Ducks.

CHARLES V. PARKER,
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BUFF BLACK

MINORCAS

TRAP-NESTED.

Eggs in incubator lots. Also Special Matings. Stock for sale. Send for mating list.

W. A. GERDES,
Pacific Grove, Cal.

Single Comb Buff Orpingtons Exclusively

We won 139 SILVER CUPS, Gold and Silver SPECIALS, Trophies and Ribbons in 1910. 102 SILVER CUPS, Gold and Silver SPECIALS Trophies and Ribbons to date 1911. Eggs for hatching, \$3.00 and up. Breeding stock, \$5.00 each and up. Mr. and Mrs. W. S. Sullivan, 100 Market St., Agnew, Santa Clara Co., Cal.

**For Additional Poultry
Advertisements See
Classified on Page 15**

and that is the common "maggot," the larva of the house fly. To get these buy some meat scraps and put them under a little straw so that they do not become dry and hard. The flies will find them. When they are well blown put them over a pan of bran and beef scrap for the worms to feed on and soon you will have a fine mess of worms. This growing should be begun two weeks before the birds are expected, as worms that are not "clean" will sometimes produce what is identical with ptomaine poisoning.

When the pheasants have these worms they may be fed finely cut lettuce or alfalfa, and in addition to this some chick feed. Many of the pheasant growers now are raising "meal worms" for their birds, but one has to buy a thousand to start with, and then wait till the next year to have enough to feed. They may be had from the city bird stores.

In making a yard for growing pheasants it is well to have in its some shrubbery brush so that they may have shade, for they are as fond of shade as they are of sunshine.

Any one who is farm raised (and in this age of back-to-the-landism it is getting to be quite the thing to be farm raised) will soon "catch on" to the modes and methods of pheasant culture, but the person who is not farm raised, and who does not live on a farm need not be deterred from taking up pheasant growing, because they are mighty becoming to a city lot, and a big number can be raised on a lot that is, say, 50x50, and who could imagine a nicer fad, and one that is at the same time interesting and financially a glowing success. Try a few pheasants and the more you get the more you can get.

EMMA J. MELLETTE,
Haywards, Cal.

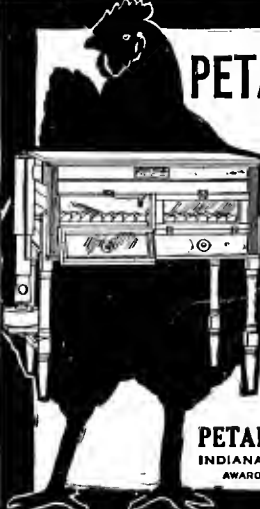
The Elrod Poultry Farm, T. H. Elrod, proprietor, was recently visited by a field representative of the Journal. Mr. Elrod has some of Mr. Bassett's Barred Rocks for foundation stock. Buff Wyandottes and White Leghorns are also raised at this farm, and Silver-Laced Wyandottes, there being over 2000 birds on the place. The Elrod Poultry Farm has an advertisement in our Poultry Department.

C. V. Parker of Hanford has some Buff Orpington, White Indian Runner and Fawn and White ducks that are choicely bred. His Buff ducks were the admiration of hundreds of poultrymen at the last Hanford fair. A trio from the Madison Square show, N. Y., raised by Bell of England, for which Mr. Parker paid \$50, gives one an idea that this breeder means to have the goods at all times. Mr. Parker has an advertisement in the Journal.

"BREAKING UP" SITTING HENS

Most of the methods of "breaking up" hens from sitting are cruel, and tire and distress the innocent hens who are not to blame for their instinct. The kindest way is the following: When it is necessary to stop the inclination, place the hen in a nice clean coop, alone, with fresh grass, and all the fresh meat cut fine that she will eat. The meat immediately increases the egg nourishment, and while the hen is having a really good time, she is fast preparing herself to commence laying eggs. It will take but two or three days before she forgets all about sitting, having other affairs to attend to.—Farm Journal.

Don't feed musty or mouldy grain, putrid meat food or musty litter. These are common causes of disease.



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of late Models are a revelation in Incubator construction. Admittedly in advance of all ideas, theories and methods. THE SURPRISE of the TIMES. The greatest invention since artificial incubation was first introduced by us, yet a marvel of simplicity.

There are so many good things about them you must see the Incubator to appreciate it.

The "BIG HATCHERIES" use them. Persons ordering "day old chicks" from the hatcheries are specifying "these chicks must be hatched in Petaluma Incubators."

Our new Catalog is the finest ever printed. Do you want a copy? It is sent Free.

It is the Incubator for you if you want to succeed. Petaluma Brooders are unexcelled.

Free Booklet, "How It All Came About" will interest you. Tells who is the oldest Incubator Manufacturer. We pay freight.

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AWARDED GRAND PRIZE ALASKA-YUKON EXPOSITION

Buff Orpingtons Headed by a son of the First Prize winner, New York, 1910.

White Orpingtons Pen headed by a son of the Champion of England. Winner of Cup and Blue Ribbon at Birmingham Club Show.

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Chicks and Young Stock
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From \$4.50 to \$8.50 per guaranteed mated pairs. No better Squab Breeders on the coast.

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Chinese Ringneck Pheasants

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WHITE AFRICAN GUINEAS.

PHEASANTS—Chinese Ring-Neck and Golden.

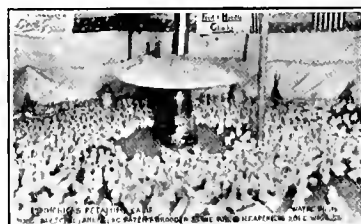
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COCHIN BANTAMS—White and Buff.

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100 SHORT-
HORN BULLS**

Sired by grandsons
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Hillcrest Hero,
Choice Goods and
other prize winning
bulls.

**300 BLACOW-
ROBERTS-
GLIDE**

**French Merino
RAMS**


In Single or Carload
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**T. S. GLIDE
Davis, Cal.**

King Lancaster, Grand Champion Bull, State Fair 1909-1910-1911
Only Bull Three Times Champion

Howard Cattle Company

You will soon be needing Bulls.
We have on hand a number of
splendid young registered Short-
Horns. 

For prices and particulars apply

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Expert Live Stock Auctioneers

HORSES, HOGS, COWS—Sales conducted in all parts of California and adjoining states
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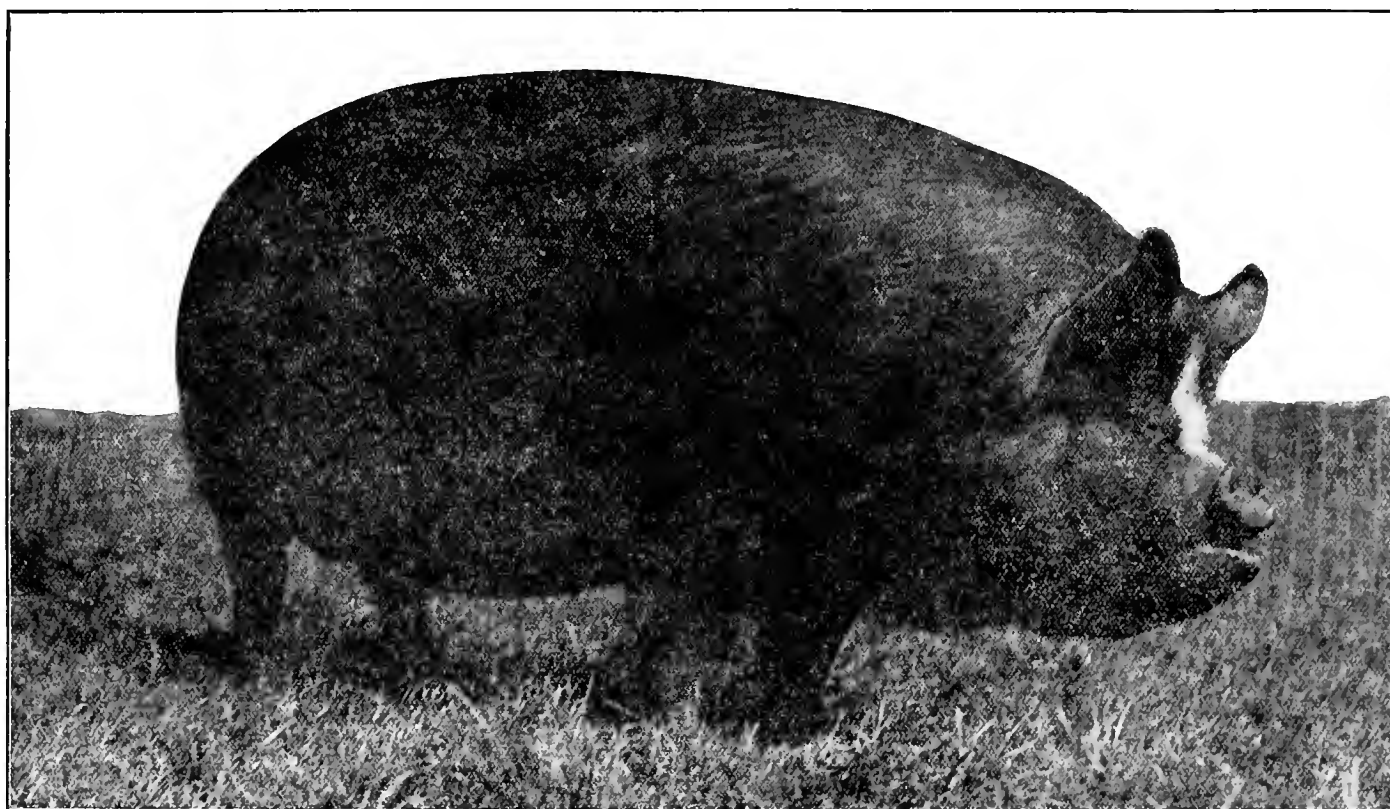
32 PAGES

THE LIVE STOCK ***and DAIRY JOURNAL***

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

MAY, 1912



RAVENWOOD DUCHESS 139TH

Owned by Oak Grove Dairy Farm, Woodland, California

AGRICULTURAL PUBLISHING COMPANY, SACRAMENTO, CAL.

The Live Stock and Dairy Journal

An Illustrated Monthly Publication for the Advancement of the Live Stock, Dairy and Poultry Industries of the Pacific Coast.

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CHARLES L. HUGHES

R. D. McFARLAND, Managing Editor
CHAS. L. HUGHES, Business Manager

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The Journal is stopped promptly at expiration of subscription period, unless remittance for renewal is received, thirty days' notice being previously given.

If you want to buy or sell any stock or merchandise in the great live stock, dairy and poultry centers of the Pacific Coast, get in touch with our advertising columns. We believe all advertising in this paper to be from persons or firms of the highest reliability. Every effort is made to protect our readers against misleading representation. We shall at all times appreciate evidence that advertisers have acted otherwise than in accordance with principles of strict business integrity.

The Journal is issued on or about the 5th of each month. Copy for all reading and advertising matter must be in our office not later than the 25th of month preceding date of issue.

PROFESSOR TRUE PROMOTED.

Our good friend, Gordon H. True, who has been connected with the Agricultural Department of the University of Nevada for several years, has been promoted to be Director of the Nevada Agricultural Experiment Station. Professor True is well known among the live stock men of California, especially by those who have made a practice of attending the fairs. Through his efforts the University of Nevada has made some highly creditable showings at the California State Fair the past two years, and it was largely through his ability that the institution is in a position to boast of some of the best live stock in the West. While the California friends of Professor True congratulate him on his advancement, they feel that the state of Nevada is to be congratulated also.

SPECIAL PRIZES FOR STATE FAIR

The Percheron Society of America has recognized the California State Fair for the first time this year by offering the same list of prizes as is given in most all other states. It is gratifying to note this action, for with the special prizes of the Percheron Society added to those offered by the State Fair management there are added inducements for Percheron breeders to exhibit at the fair.

A communication in our Sheep Department of this issue from the Secretary of the Shropshire Registry Association conveys the information that the reason the California Fair has not been recognized is because of the fact that nobody has been sufficiently interested to ask for the appropriations.

There may be other record associations who would willingly recognize the California Fair if the matter were properly broached to them, and for 1913 either the State Fair Directors of the breeders of the respective breeds of horses, cattle, swine and sheep should get busy and see what can be done in this regard.

LITERATURE FOR THE FARMER.

Many farmers fail to appreciate the value of the great amount of free literature bearing upon their business that is at their command. Not to mention the numerous bulletins issued by the Department of Agricultural, State experiment stations and universities, there are the catalogues, booklets and folders distributed by manufacturing and implement firms, and catalogues issued by breeders of live stock, who are preparing to hold sales.

While the literature sent out by manufacturing and implement firms are in the nature of advertising matter of some particular line of goods, yet they often have an educational value and good ideas are gained in looking them over. The modern farmer must keep posted regarding new products and new implements designed to enable him to conduct his business along progressive and economical lines, and in reading his farm papers should look over the advertisements closely and take advantage of any opportunity to obtain literature that costs only a postal card and a few moments time.

The catalogue of a sale of purebred stock is educational, in that it allows the recipient to study the lines of breeding that are combined in the various animals offered. The results of the sale may be watched for and pedigrees of the animals that commanded the highest prices may be gone over and compared. These catalogues are prepared at considerable expense and are often very nicely illustrated, but nevertheless are gladly sent free upon request.

In every modern business establishment, catalogues and literature bearing upon any phase of the line of business followed, are carefully filed and indexed for future reference, and we believe that many farmers would find it profitable and helpful if they followed the examples.

WRITE US A LETTER.

We are highly gratified with the manner in which the swine men of the State have come to the front with their letters for the Swine Department of the Journal. They have helped us make this one of the best features of our publication. It is our endeavor to keep every department up to a high standard, and we must remind our dairymen, horsemen, sheep raisers and poultry raisers that their co-operation is ever welcome, and that they can add much interest of the various departments by writing and telling of their methods of breeding, feeding and caring for their stock.

If you have anything worth saying, sit down some evening and write us a letter about it. Ofttimes subscribers hesitate about writing for publication because they are not accustomed to writing. We always edit such matter and put it in proper shape for publication. Give us the facts and we'll do the rest.

PREPARATION OF WOOL.

An extensive wool buyer says that if 85 per cent of the wool growers prepare their wool properly they would have five buyers for it where they have one at the present time. As it now is only 15 per cent of the wool is properly prepared, and those who prepare their wool properly have to bear a part of the penalty for the sins of the others. The buyer naturally fixes the price for the 85 per cent instead of the 15 per cent, but if conditions were reversed the producer would have more to say about the price of the clip.

The California Purebred Sire League

Many breeders and farmers signify their willingness to assist in the great campaign for the improvement of live stock on California farms by advocating the more general use of purebred sires.

The Purebred Sire League movement in California may already be said to be a great success, although less than a month has passed since the plan of the great campaign for Better Stock was placed before the breeders and farmers of the State.

Hundreds of pledge cards have been sent to all sections of the state, and many of these have been signed and returned to the secretary in order that the names may be enrolled with those who are in sympathy with the plan to promote the breeding of more stock of the better kind in California. Quite a number of persons have already sent requests for additional supplies of pledge cards, and these are being supplied as fast as the orders come in.

The best part of the plan is that as soon as a pledge card is received from a new member he is sent a request to enroll at least one neighbor in the League, and thus an endless chain of promotion and publicity in behalf of Better Stock is rapidly being formed. It is hard to comprehend the great amount of benefit that will ultimately result from this great educational movement.

State Dairy Inspector Pearis of Tulare, who has become interested in the Purebred Sire League movement has some pronounced ideas regarding grade, mongrel and scrub sires. He writes:

"I am enclosing one of the cards you sent me, and the other will be forwarded. Please send more, as I want one myself, and can have more signed as I am among the dairymen. I believe there should be a law enacted that after a certain time any male not eligible to registration should be castrated."

Another of the strongest endorsements is from Dr. J. W. Henderson, owner of the Bella Vista Stock Ranch at Martinez, who says:

"Please count me in on the purebred sire pledge advocated for California, as I believe it to be the most natural, certain and shortest road to good stock production in this or any other state and the time is opportune."

F. M. Barney of Hanford is one of the younger breeders of the State whose importations are strengthened

by the Purebred Sire League pledge. He writes:

"On the inside of the front cover of the April issue of The Live Stock and Dairy Journal, I see a pledge for the Purebred Sire League. While I am a young farmer, that is my creed. I have a purebred Duroc-Jersey boar and a purebred jack, and will get a purebred Holstein bull as soon as possible, and if I can help organize such a League in California I am with you."

That is the spirit that counts. The young man is started in the right direction and it is safe to venture the prediction that he will in the future take high rank among the successful breeders of the State.

George B. Reeves of Mountain View is one of those who is making an effort in his community despite the fact that it is not a live stock district, as his letter indicates:

"I herewith enclose National Purebred Sire League cards. You may send me a few more. This is an orchard county and breeders of purebred stock are not plentiful."

It is hoped that each breeder and farmer who wants to do his share in this campaign of publicity and promotion in behalf of Better Stock will write the secretary at once for pledge cards, stating how many he can make use of, and they will be mailed him free of any charge whatever. The cards cannot be distributed promiscuously as this would involve a great waste. The idea is to place them in the hands of persons who think enough of the purebred sire movement to make good use of them.

The Purebred Sire League is a voluntary, non-incorporated State and National organization. The California branch has no elected officers and no office expense at present, but as soon as a large membership roll is obtained a complete organization will be formed if the members deem it necessary. Publicity and promotion are what we need mostly now.

For pledge cards, or for any further information regarding the California Branch of the National Purebred Sire League, address,

R. D. McFARLAND,
Secretary, Sacramento, Cal.
Editor The Live Stock and Dairy Journal.

The Purebred Sire League Pledge

I hereby pledge myself:

- (1) To use none but a Purebred Sire in the breeding of all farm animals.
- (2) To advocate the general use of Purebred Sires.
- (3) To work for the betterment of Purebred Sires in breed-character, individual excellence, soundness and prepotence.
- (4) To discourage the use of grade, mongrel or scrub sires, and all dams, irrespective of breeding, that are diseased, hereditarily unsound or otherwise unfit in conformation and character.

THE LIVE STOCK and DAIRY JOURNAL

Showing at the Fairs

(Written for The Live Stock and Dairy Journal, by Gordon H. True, Reno, Nevada.)

This is the time one begins to look forward to the coming fall fairs. The premium lists have begun to arrive and the man who has attended fairs regularly, but never shown stock, begins to wonder if he had not better make a show this fall. The old exhibitor began as soon as his stock reached home last fall to prepare for the next year's show. In fact, the preparation of animals for show is a continuous process with him; some cows are always bred to drop September or January calves in order that the youngsters may be of good age to show; sows are bred for September or March pigs that the pigs may have the advantage of as nearly as possible the age limit for the classes in which they may show. The best breeding ewes will have early lambs for the same reasons.

This habit of forethought developed by the practice of exhibiting regularly at fairs is but one of the profits to be derived from this feature of the stockman's business. The beginner, especially, cannot afford not to show if he has an ambition to build up a business as a breeder of pure bred stock. Now that the leading fairs aim to secure the

most expert judges for the various classes, the judging ring has become one of the best possible schools for training in stock judging, and the effect of this work is most appreciated when one is an exhibitor.

It is easy for the beginner to overestimate his own stock when it is at home, but in a public show ring one is inclined to see it as it is. Even though one is able to show the spirit of a good loser in the ring, an undeserved defeat stimulates to a greater effort for just recognition the next year.

The advertising feature of showing is one of its greatest assets. There is no more effective way of advertising than by exhibition at fairs and it is needless to say that the cash returns will depend upon the quality of stock shown. Nor are the cash returns to be compared with the reputation which, once established, carries on through the years.

The breeder who has the show habit, who is always searching his flock and those of his less alert fellow breeders for possible show material, and giving these show prospects a little extra care in the hope of devel-

oping them into winners, must naturally be a good feeder and will of necessity build up a good herd. Then, if it is his aim to make up a show herd, he will sometimes for that reason refuse tempting offers for some of his best animals that might otherwise be sold to the detriment of his herd. So we find that all along the line the stockman who makes it a part of his practise to show has a decided advantage over the one who does not.

This is more clearly apparent when we consider the management of a farm in the light in which a merchant or a manufacturer conducts his business—as a business in which an established trade is one of the most valuable assets.

Many earnest young men, good judges of farm animals and ambitious to succeed, have established flocks or herds of purebred animals of good individuality only to give up after a few years because they could not find sale for their stock, which was in every way equal to that of more successful breeders. The fact that one has good stock does not sell it. The buyer and seller must get together and until a reputation and a trade is established

this takes effort. The live stock business is a many sided one, and being a good salesman is one of the most important characteristics of the successful stockman. Nowhere, so well as at the fair, can the beginner get the lessons in salesmanship.

Then, there is a social side to this exhibition business. Many valued and lasting friendships are made at the fairs. Among the stockmen of our country are to be found the best of men, big of heart and big of brain; many of them men of large affairs. In them the spirit of true sportsmanship is strong and to have met them in the competition of the show ring is a pleasure. To have such men as your friends is one of the things we live for.

The question should not be, "Can we afford to show at the fair?" but rather, "Can we afford not to show?" The State fair affords great personal opportunity to every ambitious stock man. In addition to this it is a most effective state-building institution; not only do you need what it can do for you but it needs your support, and in supporting your fair you are helping effectively in the upbuilding of your State.

Red Polls are native of Norfolk and Suffolk Counties, England. Hornless, or polled, cattle have existed in the county of Suffolk, England, from time immemorial. The eighth edition of the Encyclopedia Britannica, speaking of this old breed, says:

"The county of Suffolk has for centuries been celebrated for its dairy produce, which is chiefly obtained from a polled breed of cattle."

Of the Norfolk strain of the breed, Mr. Euren, in the account prepared for the Herd Book, says:

"The files of the Norwich Mercury show that as early as the year 1778 there were whole dairies of polled cows in Norfolk."

Red Polled Cattle

(By H. A. Martin, Gotham, Wis.)

The year 1846 may be taken as the date from which the Norfolk and Suffolk varieties merged into each other, so as to be spoken of as one and the same breed.

There seems little doubt that our so-called native muley cows are descendants, more or less mixed with other strains, of the Norfolk and Suffolk cows brought over by the early emigrants from that section.

The first regular importation was made to the United States in 1873. Since this date many importations

have been made, and today we find Red Polls in larger numbers in the United States than in their native home.

Red Polls are a dual purpose breed. Their Standard calls for such an animal, and the breeders who have given this breed a thorough trial find they uphold the name given.

The adherents of the breed do not claim the cows will equal or surpass in dairy production the best of the special dairy breeds, nor do they claim they will equal or surpass the best of

the special beef breeds in beef production. But they do claim they will produce a substantial profit to the farmer.

The cows are good milkers, giving a good flow of milk which contains an average amount of butter-fat. They are easy keepers, strong and vigorous, being able to care for themselves under conditions where less vigorous animals would fail.

When milking the cows will often work themselves down in flesh, but as soon as dry flesh up very quickly, making a smooth animal which many of our professors would pronounce a good type of beef animal.

The steers are fine growers and feeders. While they do not, as a rule,



MIDNIGHT.
Excellent Type of Red Polled Bull.



COSY 2D.
Leading Show Cow of Red Polled Breed.



THE DAIRY



California Holstein Makes World Milk Record

A California Holstein cow, Riverside Sadie De Kol Burke (70708), owned by A. W. Morris & Sons of Woodland, Yolo County, has taken her place at the head of the list of milk producers of the world by producing more milk in seven and in thirty days than any other cow has ever given. She has taken this honor from the State of Washington and brought it to California.

On official test this cow has produced 134.7 pounds of milk in one day, 920.8 pounds in seven consecutive days and 3750 pounds in thirty days. She has also produced 32.8 pounds of butter in seven days and 130.03 pounds in thirty days. The world's milk record has been held for the past year by the Holstein cow, Margie Newman, she having yielded, in seven days, 868.2 pounds of milk, and in thirty days 3735.6 pounds.

Riverside Sadie De Kol Burke has always been a heavy producer. She had her first calf as a 2-year-old, and has produced a calf each year, and each year has exceeded her former year's production, and in this, her ninth year, has made the world's milk record.

After calving last year she had milk fever, and recovering rather slowly, was milked but twice daily the first two months, during which time she reached 94 pounds of milk at two milkings, which is said to be the record for two milkings. She was milked three times daily the next ten months, and during the last thirty days of the year gave over 1500 pounds of milk. In the 365 days she produced 25,981.8 pounds of milk and 980.16 pounds of butter, which is the milk and butter record for California.

The cow was not allowed to go dry for several months, and fattened in order to get a phenomenal short record, but, on the other hand, freshened after being dry less than one month, and after being down for thirty-six hours with milk fever she comes on with this remarkable production.

She will again be officially tested for the year, and, barring accident and sickness, will undoubtedly increase her last year's record and make a very large record for two successive years.

Riverside Sadie De Kol Burke is one of the best bred cows of the breed. Such a record as hers can result only from good breeding. She traces three times to that grand old foundation cow, De Kol 2d, the greatest transmitting cow that ever lived, and twice to Sadie Vale Concordia, the first cow in the world to make 30 pounds of butter in seven days. Her sire, De Kol Burke, is one of the only four bulls in the world with four 31-pound daughters, and the only bull in the world with four daughters above 124 pounds of butter in thirty days. Three of the above four bulls, including De Kol Burke, are half brothers, being sired by De Kol 2d's Butter Boy, a son of De Kol 2d.

During this test the grain ration consisted of ground barley, oats, bran, distillers grains and oil meal. At the time of her heaviest production she was eating 24 pounds daily of the

above mixture and about 50 pounds of roots, with what alfalfa hay she would eat.

The test was made under the supervision of James Anderson, and when he made his report to the Holstein-Friesian Association of America a verification test was ordered immediately. A second man was sent from the University of California, and the cow was under constant watch day and night for forty-eight hours, and on this re-test showed a good gain.

The second year's test of this wonderful cow will be watched with a great deal of interest by breeders and dairymen of this coast.

A BIG DAIRY PROJECT.

J. T. Raitt, who formerly conducted a certified dairy at Santa Ana, has purchased the Ridgeway ranch of 480 acres, and the Sunflower Creamery, near Porterville, Tulare County.

Mr Raitt promises to make of the place under his management, one of the finest dairy plants in California, and expects to spend from \$25,000 to \$30,000 in the development of the property in addition to the \$100,000 which the place cost him. He will add a herd of 150 purebred dairy cows, which have already been bought.

Origin and Development of Holstein-Friesian Cattle

(By J. W. McAllister, Chino, Cal.)

(Continued from April issue.)

In Holland the Holstein-Friesian is bred for large size, robust constitution, early maturity and milk and beef production combined. She is expected to drop her first calf when two years old, and when she becomes seven or eight years old, her owner realizes a handsome profit from her by selling her to the butcher.

It is the ordinary Dutch farmer that has brought the Holstein-Friesian up to its great degree of superiority of to-day. There are no great cows, families, or breeders in Holland, as there are in America, but the great cows and families in America have not sprung up by chance; they have been the product of countless centuries of breeding among the Dutch. Lately, however, there has been a determined effort to improve the breed in Netherlands within the last forty years, and a superior class of cattle have been selected and registered by the Dutch associations.

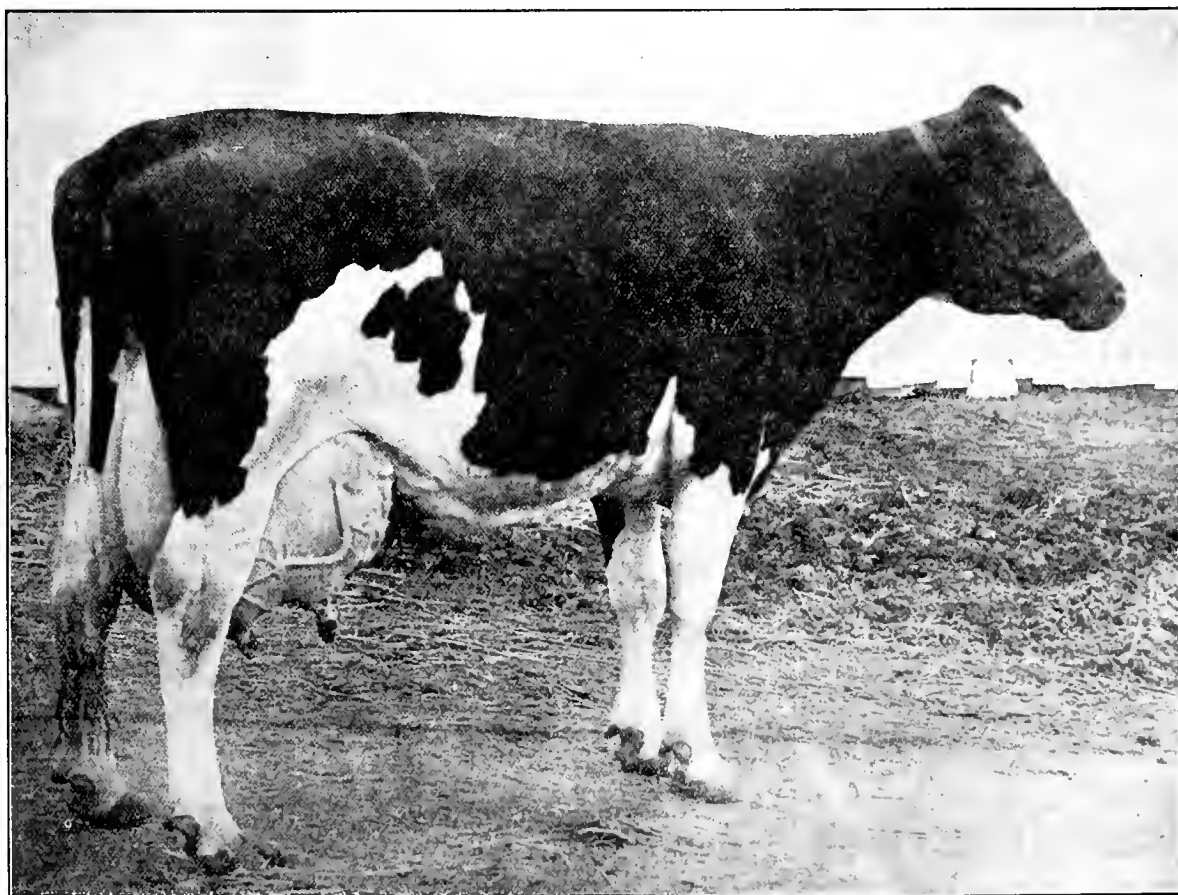
The Dutch way of breeding by personal selection, intensified and perfected by passing down from one generation to another has made the Holstein not only the largest milker, but the greatest in beef production of any of the different dairy breeds. The judicious Dutch never allowed their

cattle to be inbred, as the dairy breeds of the Channel Island have been done, and so we find to-day the Holstein-Friesian is the largest, strongest, most prolific and the longest lived cow in the world. Handled largely by the women and children who looked upon them as the family pet, the Holstein cow has become the most docile, gentle and sedate cow of all the dairy breeds, under these close domestic relations.

The severe climate of Holland together with the strong, vigorous constitution inherited by the Holstein has made the breed the hardest and most robust in the world.

When it is considered that dairying has been the almost exclusive occupation of Friesland from the earliest accounts of history, that the prosperity of all business conditions rise and fall with the price and amount of butter produced, and that a Dutch farmer's own personal success depends upon the quality of his cattle, there is no wonder but that the Holstein-Friesian has been brought up to her high standard of excellence.

Owing to their unequalled adaptability to varying climates, soils and foods, the Holstein-Friesian has spread throughout the world. They can as



RIVERSIDE SADIE DE KOL BURKE (70708).

The Magnificent Holstein-Friesian Cow Who Has Distinguished California as the Home of the Champion Milk Producing Cow of the World, in Tests Covering Seven Days and Thirty Days. Owned by A. W. Morris & Sons, Woodland, Cal.

After Calving

Every Cow Should be Treated with

HOOD FARM BREEDING POWDER

It cleanses, disinfests, causes the cow to clean quickly, and breed readily. It is a safeguard against Abortion, there is less use of the bull, and calves are stronger.

We quote what Mr. H. F. Weaver of Millard, Wis., says:

"I have used your Breeding Powder for about four years with very good success. I think if every dairyman made a practice of injecting every cow three or four times after calving that there would be very few barren cows."

Mr. C. S. Bassett, Route 1, Kalamazoo, Mich., is very grateful for the benefits obtained from the use of Hood Farm Breeding Powder. In a recent letter he writes as follows:

"I have used Hood Farm Breeding Powder on my cows after calving, for about three years, and in that time I have not had a cow requiring more than one service."

You cannot get the best results of which your stock is capable without using

HOOD FARM BREEDING POWDER.

Prices prepaid \$1.15, \$2.75 and \$5.00. Flexible Injection Tube, by mail, 90c. Mammoth size Breeding Powder and Tube, prepaid to nearest railroad express point, \$5.75.

C. I. HOOD CO., Lowell, Mass.

Offerings all Sold

REGISTERED HOLSTEINS.

Orders taken for bull calves to be born of A. R. O. dams. Heavy milking strains with high average per cent fat.

LINWOOD FARM,
Santa Cruz, Cal.



Purebred Registered

HOLSTEIN CATTLE

The Greatest Dairy Breed

Send for FREE Illustrated Booklet
Holstein-Friesian Assn., Box 165, Brattleboro, Vt.

Pacific Guernsey Herd

If interested in producers and catalogue of the herd, address

C. S. RASMUSSEN

LOLETA

HUMBOLDT COUNTY CALIFORNIA

SHORTHORNS

20 Head of Service Bulls
For Sale

MILK STRAIN

Attention Dairymen!

I am breeding the finest stock in the West. Young bulls for sale—all pure-breds. Write for prices and pedigrees.

JOHN LYNCH,
Petaluma, Cal.

Holstein-Friesian Cattle

A Few Choice Registered Bulls and
25 Choice Registered Heifers.

Prices on Application.

CHAS. JAY WELCH, Los Banos, Cal.

easily stand the cold winters near the Arctic Circle in Russia, as the hot summers in Central America. They have spread over more countries and have adapted themselves to more climates than all the other dairy breeds together. The large size, the black and white coloring and the milk and beef distinguishes the Holstein-Friesian from all other dairy breeds and make them stand out prominent in every country. Wherever they have been introduced, never yet has the Holstein failed to maintain the same high standard of superiority as in Holland, or failed to improve the native breeds with which they have been intermingled. In America they have raised the average milk production per cow at least twenty-five per cent. In England, according to the best authorities, the intermixing of the Holstein with the native breeds of cattle has produced the improved Shorthorn. In Russia the Holstein is universally recognized as the best dairy breed. For hundreds of years Holland has been drained upon for the improvement of other breeds of cattle. The Jutland breed of Denmark, the Oldenburg and East Friesian breed of Germany, the Kolmogorean breed of Russia, and the Flamande breed of Northern France all sprung from the original Dutch Holstein-Friesian breed. These different breeds modified somewhat by environments, have their different herd book and are jealously preserved in their purity.

In America it is possible that the first Holstein-Friesian imported was in 1625 by the Dutch East India Company. Importations were made from Holland in 1810 and 1825 but the purity of these early cattle was soon lost. The first man to import and maintain a purebred herd of cattle was W. W. Chenery of Belmont, Massachusetts, who made importations from Holland in 1852, 1857, 1859 and 1861. Mr. Whiting of Massachusetts also imported cattle from Holland in 1871 to 1875. Other importations followed rapidly in order. It is to these early courageous men that we owe to-day a large part of the success of the breed in America. Without considering returns, these early importers selected the best individuals of Holland as foundation stock for our country, and many of our best families to-day trace their pedigree back to these early importations from Holland. The energy, pluck and judgment that these men showed in establishing the Holstein-Friesian in America is one of the brightest spots on the history of the breed.

(To be continued.)

IS COUNTERFEITING

AN "INDUSTRY"?

Swift & Co. are using the advertising columns of many newspapers to urge the repeal of the 10 cents tax on colored oleomargarine, saying that "this is repressive taxation and favors one industry at the expense of another." If counterfeiting is an "industry," then the statement of Swift & Co. is, perhaps, true. On honest oleomargarine there is practically no tax. Ninety-seven per cent of the oleomargarine consumed last year was practically untaxed. Thousands upon thousands of pounds of practically untaxed oleomargarine have been going into consumption during the last few months, and the business has been good. But this does not satisfy the manufacturers. They want the right to color their product. The motive for coloring oleomargarine is to make it counterfeit butter. Is counterfeiting an "industry"? Can a counterfeit be sold honestly? Is counterfeiting good for either consumer or for the producer of the genuine article?

GEORGE M. WHITAKER.

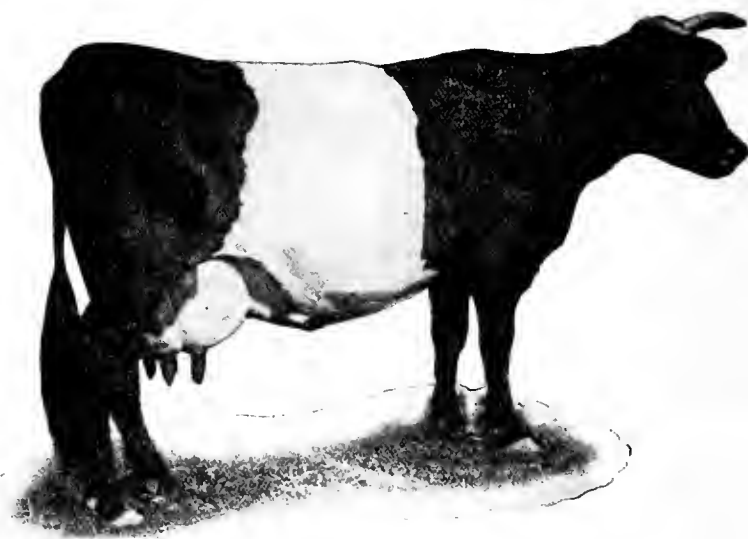
Raising the Dairy Heifer

In the first place, when the baby calf arrives, if we leave her with the mother for a couple of days she is much surer to get a good start. Some dairymen are of the opinion that it is far better for the cow if the calf is taken away at once, and with some cows I have found this to be the case, but with a quiet-dispositioned Holstein it is usually better for both the cow and the calf if the baby is left with her mother for a couple of days. In this way the calf is sure to get the first milk, which is so essential to the little one. Some will say that it will be harder to teach her to drink if she is left with the mother at all, but I have not found it so. In fact, I believe she will learn quicker. My method of teaching the calf to drink is to allow her to suck my firefingers just a little until she gets her nose well into the milk, and then while she is still sucking I slip them out and let her learn that the milk can be secured without sucking the fingers.

This process may have to be repeated many times during the first two or three feedings, but she will soon learn to dip her nose in after the milk without worrying about the fingers. In case she fails, as some do, to suck

I am feeding one and one-half gallons at six or eight weeks, and by the time she is three months old I am feeding her nearly two gallons.

Many dairymen think that when she is three months old she is old enough to wean, but I do not believe in this at all, and I think that right here is where many of them make their mistake. The age at which I would take the milk away from the heifer varies with conditions and with the season of the year. If it is in the spring or summer, when there is plenty of succulent food to turn her on, I might wean her at four or five months, but if it is in the fall or winter, when I have nothing to supplement the milk but dry hay I should continue feeding the milk until she is at least six months old. While I am speaking of hay, I want to say that I always supply a finer quality of alfalfa hay for my calves than for the other stock. I begin feeding it to them as soon as they will eat it, giving them as much as they will clean up twice a day. My calf stanchions are made so that the calves cannot suck each other's ears while they are being fed milk, and by feeding the hay while they are still stanchioned up, when



Many Times Champion Dutch-Belted Cow, Echo 2d, Seven-Year Milk Record, 74,465 Pounds. Owned by Frank Reed Sanders, Mesa, Ariz.

the fingers, I dip a little of the milk up in my hand and pour it into her mouth, and when she has once tasted it she will begin sucking.

If she is a large, vigorous calf I feed her about a gallon of her mother's milk twice a day for ten days, and then I begin feeding part skim milk, increasing the proportion of skim milk each day until after a few days she is on an entire skim milk ration. If at any time during this treatment she shows signs of scouring I lessen the quantity of milk and give a tablespoon nearly full of charcoal thoroughly mixed with the milk for two or three feedings. This treatment is usually all that is necessary, but if the case is a severe one I first give a good dose of castor oil (a small cup), and then, if necessary, follow with the charcoal treatment.

When I begin feeding all skim milk I usually use some flaxseed meal (oil meal is not good). The way I use this is to boil a small cupful in about two gallons of water and mix a cupful of this porridge with the calf's milk once a day. As I have already stated, I begin feeding her about one gallon of milk twice daily, but as she grows older and requires more I increase the quantity, so that as a rule

they are turned out they proceed immediately to eat their hay instead of sucking and hunting each other, which is often injurious.

She is kept away from the other calves until she is about three weeks old, when she is dehorned with caustic potash and put in a pen with the other small ones, where she can get more exercise, and as she grows older and stronger and gets too rough for this pen she is moved up into the pen with the larger calves, where she stays until she is weaned and turned out on pasture. These two pens are always provided with fresh water, are sheltered from the summer sun as well as from winter storms, and we clean out manure and furnish dry bedding when necessary.

One very important phase in the raising of the dairy heifer has not been touched upon yet, and that is that kindness is a very essential feature. I have seen men abuse a calf so badly while teaching it to drink that it never recovered. Of course, no man of intelligence will tolerate such treatment of his animals, but instead of merely preventing such treatment there should be much kindness shown them.

My heifers, instead of throwing up their heads and tails and sprinting off to the other side of the pasture when any one comes near, will usually come up to investigate matters and be petted.

Of course, in raising the dairy heifer we must do it as economically as possible, but we must never lose sight of the fact that we are going to de-



They Appreciate Kind Treatment.

pend upon her in after years for returns, and if she is not properly nourished while young she will not be able to produce her best for us when she is older.

The time of breeding the heifer will depend somewhat upon her growth, but usually I breed mine at about fifteen months. T. J. GILKERSON, Kings County, Cal.

The Live Stock and Dairy Journal— So many people think when they have a heifer calf dropped, that when she is grown they will have a dairy cow. My observation has been that about four out of ten of the common breeds (or no breed) is about what you can expect to be worth milking, while by using a purebred sire of any of the dairy strains one can easily expect that eight out of ten heifer calves will, by proper care, make a cow worthy of a place in the dairy herd.

When a heifer calf is dropped I never take it from its mother for at least two days, or if the dam is a heavy milker, some times a week, as it prevents milk fever in the dam, and the first milk is needed by the calf to regulate its howls.

Then we take it away from the mother to a dry, warm place. We put it where the mother can see it, so she will not worry.

You may have to let it go without milk until it is quite hungry before it can be taught to drink. Then give it its mother's milk. Until it is a month old it should have whole milk. Milk that tests 3 per cent butter-fat is about the best for them. Too rich milk is one of the causes of indigestion.

When you begin to change to skim milk, change very gradually. When you place it on skim milk entirely, begin to teach it to eat rolled barley or oats. Rub the grain on its nose while it is moist from drinking and the calf will lick it off, and thus soon begin to eat the grain. Never put the grain in the milk.

Be careful not to feed too much skim milk. Three to six pints is usually what a 4 or 5 weeks old calf will use, this to be increased as they grow older. Always judge by its size and condition the amount to be fed. It should have hay or pasture as soon as it begins to show that it wants it.

Breed so as to freshen when about 2 years old. I prefer that age, as their udders develop better than when let go until they are older. She should be handled before she freshens. Then when you milk her you will have very little trouble. In fact, I have no more trouble with my heifers than with the old cows. GEORGE T. FARMER, Kings County, Cal.

CALF SHOULD HAVE THE FIRST MILK

Nature has provided something in the first milk that is very essential in getting the calf's digestive machinery started right, and I think it should be permitted to have it. We usually leave the calf with the cow a couple of days, until it is nicely straightened up, then comes the most important time in the life of the calf, when we take upon ourselves its feed and care; and here is where we want to exercise a lot of kindness and gentleness, for if we are impatient and rough in our treatment with them they will distrust and fear us, and the chances are they will never forget those first lessons and impressions. A cow will never do her best unless she has perfect confidence in us.

It is an old saying that you can catch more flies with molasses than with vinegar; so you can do more by coaxing than driving. When teaching the calf to drink, don't push its head into the pail; wet your fingers in the milk and let it suck, and coax its head into the pail, and usually the second or third time it will drink of its own accord.

These are three essentials at this time: The quantity of milk, the temperature and quality. Calves are injured more by not observing carefully these rules for the first few weeks of their lives than any other way. At this age their little stomachs are not strong, and a little care exercised at this time often means the difference between an unprofitable and a profitable animal.

The amount of feed at this time will depend largely on the calf and somewhat on the nature of the milk. This amount must be determined by the feeder, but this precaution is always advisable—better to begin carefully and work up to what they can handle, rather than to begin with a large amount and get them off their feet and then have to commence all over again.—F. H. Scribner in the Holstein-Friesian Register.

A GREAT SALE OF IMPORTED JERSEYS ON MAY 21ST

Breeders and dairymen will read with interest the announcement in this issue of the big sale of Jersey cattle to be held by H. West at Scappoose, Ore., on May 21st.

For the breeder or dairyman who desires to obtain some of the very best blood lines known among the Jerseys, this sale will offer an opportunity such as has never before been equaled on this coast.

The West herd, consisting of ninety head, were all imported direct from the Island of Jersey by Mr. West. In the lot are found blood lines of Golden Jolly, Stockwell, Majesty Flying Fox, Noble of Oaklands, Golden Ferns Lad and Eminent—names that make every Jersey enthusiast sit up and take notice, as there are none better known. Many of the females in the lot were bred when purchased, so there will be a number of young things that were imported in dam. Much of this stock have for their sire Noble of Oaklands, the great \$15,000 bull.

Persons who have looked over the West herd declare that it would be hard to get a more uniform lot. Each individual was selected by Mr. West personally, and his judgment in the matter of dairy type is known to be excellent. This will be the third annual sale, and will eclipse the two former sales in every respect.

TRADE

in your old separator
on account of a new
DE LAVAL
CREAM SEPARATOR

38,796 Users did so Last Year
26,569 in the U. S. Alone

It's come to be an accepted fact that DE LAVAL cream separators are as much superior to other separators as other separators are to gravity setting systems, and that an up-to-date DE LAVAL machine will on an average save its cost every year over any other separator.

Aside from the actual saving in more and better cream and butter and in time of separation and cleaning, easier running, greater durability and less repairs, there's the pride, comfort and satisfaction which none but the owner and user of a DE LAVAL machine can feel in his separator.

In consequence thousands of users of inferior and worn-out separators of various makes take advantage every year of the educational allowances which the DE LAVAL Company continues to make and trade in their old separators.

APPLIES TO OLD DE LAVAL USERS ALSO.

While all this applies particularly to the users of inferior separators it applies likewise to the many thousands of DE LAVAL machines 10 to 25 years old. They are not worn out and are still superior to other new machines of today, but there are so many improvements embodied in the modern DE LAVAL machines that these old DE LAVAL users can well afford to make an exchange and soon save the cost of doing so.

SEE THE NEAREST DE LAVAL AGENT.

He will tell you how much he can allow on your old machine, whether a DE LAVAL or some other make, toward the purchase of a new DE LAVAL. If you don't know a DE LAVAL agent, write to the nearest DE LAVAL office giving make, number and size of your present machine, and full information will be sent you.

DE LAVAL DAIRY SUPPLY COMPANY

165 Broadway
NEW YORK

101 Drumm Street
SAN FRANCISCO

1016 Western Avenue
SEATTLE

You Can Laugh at Dry Seasons

If you have even a small patch of the

TRUE BURBANK CACTUS

A single acre will easily carry one thousand tons of feed. The fruit, also, is produced in enormous quantities.

New 26-page Illustrated catalog.

Luther Burbank,

Santa Rosa, Cal.

The herd is reported in the pink of condition, and is turning out great quantities of fine, rich milk. In the herd are several 40-pound cows and a number of heifers just coming in. There are five service bulls to be sold, and they are a splendid lot of promising sires. The cattle were landed in Oregon last fall, and are thoroughly acclimated.

Catalogues for the sale are now ready and will be mailed to those who request them.

PRIZES BY THE HOLSTEIN-FRIESIAN ASSOCIATION

The Live Stock and Dairy Journal—The Holstein-Friesian Association has announced its schedule of prizes for the fairs of 1912, including the California State Fair.

The present offerings, in addition to liberal prizes for exhibition of cattle, include prizes for dairy butter and for cheese made from milk of registered Holstein-Friesian herds, and for exhibits of milk and cream.

The prize money offered fully covers each regular classification, except champions and grand champions, thus affording winners of minor prizes as well as first an opportunity to profit thereby. The National Dairy Show is especially favored with an award of \$750 cash.

It is now the practice of the Holstein-Friesian Association to regularly preserve and publish complete lists of the names and numbers of all prize-winning animals, and those constituting herds or groups. This method adds to the permanent value of the prize-winning animal and likewise gives prestige to the successful breeder or owner. Each fair Secretary is now required to file a detailed report of the awards with the Secretary of the Holstein-Friesian Association, showing these facts, and unregistered animals, although purebred, will hereafter have no standing in the show ring, nor be awarded any prize. The Association also furnishes its official list of qualified judges, who may be employed to place the awards.

The special prizes offered for the California State Fair are as follows:

Fifteen per cent cash will be added to each cash prize in Class 7, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14. Class 15, 5-day Milking Test, Sections 1 and 2, silver cup to each prize winner, if a registered Holstein-Friesian.

The other Pacific Coast fairs recognized are the Oregon State Fair, the Spokane Inter-State Fair and the Washington State fair.

F. L. HOUGHTON, Secretary.
Brattleboro, Vt.

The George A. Smith sale at Corcoran, Cal., on May 18th, marks the dispersal of one of the most successful and profitable herds in California. Mr. Smith has for many years bred prize-winning stock, and this sale will afford an opportunity to younger breeders to secure some excellent individuals for foundation stock. With Colonel Perry officiating, this sale should be a record breaker for California.

Fat is profitable only in certain places on the animal. One great trouble with scrub animals is their tendency to put on fat where it is not wanted and remain lean in just those parts which would enhance the value of the animals were they better developed.

Billy Welkes of Visalia, Cal., reports shipment of one car of calves, one of hogs and two of bulls to Los Angeles during February.

UNIVERSITY OF CALIFORNIA EDUCATIONAL BUTTER SCORING CONTEST.

Report of Second Entry, Fourth Year, Scored April 18, 1912, at University Farm, Davis, California.

Among the thirty-one entries of butter sent to the second bi-monthly scoring of 1912 were a number of cubes which showed fine quality, and which were exceptionally well made. There were, however, a sufficient number which possessed that flavor characteristic to butter made from old cream and tainted cream to bring the average score down to 91.71, practically the same average as that of the first scoring in February.

The butter was scored as follows by W. B. Thurston, Federal Dairyman, E. H. Hagemann and Leon M. Davis:

Buttermaker.	Creamery.	Location.	Score.
William Paulson	Visalia Co-Operative Creamery	Visalia	95
E. D. Curl	Cal. Polytechnic School Creamery	S. Luis Obispo	94
H. Ostergard	Siskiyou Creamery	Greenview	94
M. Simonsen	University Farm Creamery	Davis	93½
Carl Hansen	Riverdale Co-Operative Creamery	Riverdale	93½
L. H. Lauritsen	Los Angeles Creamery Company	S. Luis Obispo	93½
Peter Petersen	Sunset Creamery	Loleta	93
Hans Beck	Danish Creamery	Fresno	93
P. M. Becker	Grizzly Bluff Creamery	Grizzly Bluff	92½
M. G. Johnson	Cottonwood Creamery	Cottonwood	92½
N. Christensen	Laton Co-Operative Creamery	Laton	92½
J. L. McDowell	Dairymen's Co-Operative Creamery	Tulare	92½
G. G. Plunkett	Visalia Creamery	Visalia	92½
Arnold Madsen	Salinas Creamery	Salinas	92
F. C. Hyde	Tulare Co-Operative Creamery	Tulare	92
Walter M. Smith	Oakland Cream Depot	Oakland	92
William Oelkers	Calexico Creamery Association	Calexico	92
G. H. Nielsen	Kern County Creamery	Bakersfield	92
J. C. Phillips	Delta Creamery	Imperial	91½
N. J. Hansen	Elk Grove Creamery	Elk Grove	91½
Victor Baciarini	Suisun Creamery	Suisun	91
Simon Koppes	Ceres Creamery	Ceres	91
P. Petersen	McFarland Creamery	McFarland	90
F. L. Forester	Elkhorn Creamery	Santa Barbara	90
Charles R. White	Porterville Co-Operative Creamery	Porterville	90
Louis A. Sylvia	San Ramon Valley Creamery	Danville	90

There were four scores below 90, the lowest being 86.

Tainted Flavor Noticeable.

In several cubes there was a tendency toward a bitter, weedy flavor, which always calls for unfavorable criticism. With the placing of cows on pasture, especially if the pastures are growing such weeds as mustard, etc., there is a danger of the tainted flavor, and buttermakers will find it necessary to use extra care if they would avoid this trouble. A good, clean starter will help much, and the amount should be all that conditions will permit. Butter possessing a tainted flavor shows up badly when compared with a piece which has the desirable flavor and aroma. The manufacture of good butter calls for good cream, and wherever butter is scored, either in a contest or on the market, this fact stands out plainly. The number of criticisms for high acid and old, stale flavors indicate that in many cases the cream was held too long before churning. Even though weather conditions are much more favorable now than they will be later, creameries should insist on more frequent deliveries. If cream must be held let it be done in the creamery, where there are better facilities for cooling rather than at the dairy, but a shorter time between milk pail and churn will insure better results.

Better Workmanship Shown.

As compared with the last scoring there was a noticeable difference in the number of mechanical defects, for but 16 per cent of the butter criticised because of faulty body and texture at this scoring, as against 35 per cent of that sent to the February contest. Temperatures used in churning or washing were responsible in all cases. We still find buttermakers who send their butter out in a gritty condition. While high salt may often pass on the market, if butter is gritty from undissolved salt it is usually cut, because grittiness is very objectionable. Being careful of methods all through the process of making often means a point or two more on the total score, because thereby mechanical defects are avoided. If the buttermaker does all in his power to overcome defects for which he may be responsible, he is in a better position to demand an improvement in the cream furnished by his patrons.

Respectfully submitted,
LEON M. DAVIS.
University Farm, Davis, April 19, 1912.

Note to Buttermakers—Since the last report was issued a donation of \$10 to the contest fund has been received from the Worcester Salt Company, New York, N. Y.

ECONOMICAL FEEDING.

Economical feeding is one of the most important problems the stock or dairy farmer must solve. In this connection the advertisement of the Newell Mathews Company of Los Angeles and Stockton, Cal., should be of interest to our readers. This firm manufactures a grinding mill adapted to use on the farm, and by which a great saving in feed may be made. Their mills grind stalks, hay, grains, etc., and effect a saving of 20 to 30 per cent. At this rate a grinding mill soon pays for itself. The Newell Mathews Company sends a free illustrated booklet on grinding machines that contains facts and figures of interest on the subject.

It will pay every reader of *The Live Stock and Dairy Journal* to write to Luther Burbank at Santa Rosa for a copy of his 26-page illustrated catalogue, which is offered free in the advertisement in this issue. Mr. Burbank is known as the wizard of the plant world, and his Burbank cactus, which gives an enormous yield, even in dry seasons, is a splendid food for all kinds of stock. Write for the book, and don't forget to tell where you saw the advertisement.

A bran mash is good for the cow a few days before calving, and may be the means of preventing retention of the afterbirth.

Dairymen should always bear in mind that cows need much water.

**J. H. HARLAN CO.
WOODLAND, CAL.
HOLSTEINS**

Nothing to sell now, but we are booking orders for calves for future delivery.

Roselawn Stock Farm
WOODLAND, CAL.
**BREEDER OF SHORTHORN CATTLE,
POLAND CHINA HOGS,
SHROPSHIRE SHEEP**
T. B. GIBSON Proprietor

**N. E. NEILSEN
VETERINARIAN**

Sacramento, California
Office and Modern Hospital—Thirteenth St. bet.
1 and J Streets

Dairy Cows For Sale

Free from tuberculosis. Official test certificate with each cow.

I sell these cows singly or in car lots.

C. P. STANBROUGH, D. V. S.,
Patterson, California.

BIG MONEY in the OFF SEASON

One Man can run it.

Earn \$2000.00 a year extra money, besides your regular farm work, with the

Improved Powers Boring and Drilling Machine. Bore a well 100 ft. deep in 10 hours. One man can run it; it operates and easily moves over any road. Bore everything except hard rock, and it drills that. No tower or staging, rotates its own drill. Easy terms; write for catalog.

Lisle Mfg. Co.
Box 526, Clarinda, Iowa.



SNAPS IN NEVADA LANDS

We have for sale Ranch of 2240 Acres, well improved. Ranch produces 1500 tons hay each year; 300 head of cattle and 50 head of horses. All for \$72,000. Terms Also Ranch of 1500 Acres, part hay and balance pasture land; cut 800 tons hay last year; 300 head of cattle and 50 horses go with this also. Price, \$45,000. Terms given. We have other properties. Write.

McELROY & BARCLAY :: :: Elko, Nevada

Milk Strain Shorthorns

I offer for sale a number of Registered Bulls of the best breeding, fit for immediate service. Also a carload of High-Grade Cows. Write me for particulars and prices.

A. BALFOUR
350 CALIFORNIA STREET, SAN FRANCISCO.

The Live Stock and Dairy Journal— I am enclosing you the breeding of Don Adonis of Linda Vista, No. 20616, a Guernsey bull recently purchased to head the dairy herd at Grape Wild Farm.

This young bull is, no doubt, the best bred Guernsey that has arrived in this state for a long time back, perhaps that ever has. He is a line-bred May Rose bull, having five crosses of the May Rose strain.

His sire, Jathro's May King of Linda Vista, is a son of Jethro Bass, 11366, A. R. 122, and Langwater Rosie, A. R. record 15083 pounds of milk and 724 pounds of butter-fat. This great bull (Jethro's May King) is a full brother of Rose of Langwater, 24204, A. R. 1445, 12966 pounds of milk and 669 pounds of butter-fat, which was the former world's record for a 2-year-old.

Both Jethro Bass and Langwater Rosie are daughters of Imp. King of the May, A. R. 72, a son of Imp. May Rose King, A. R. 41, and Itchen Daisy III, A. R. 100, 13636 pounds of milk and 714 pounds of butter-fat. Itchen Daisy III is a sister to the dam of Spotswood Daisy Pearl, who has a champion record of 18602 pounds of milk and 957 pounds of butterfat. The dam of Jethro Bass is Dolly Bloom, A. R. 40, 17297 pounds of milk and 836 pounds of butterfat, and the dam of Langwater Rosie is Imp. Hayes Rosie, A. R. 116, 14633 pounds of milk and 714 pounds of butterfat.

The dam of our calf, Don Adonis of Linda Vista, is Comely Rose, A. R. 1408, with 12223 pounds of milk and 541 pounds of butterfat. The sire of Comely Rose is Imp. May Rose King, A. R. 41, and her dam is Comely IV, A. R. record 11920 pounds of milk and 654 pounds of butter-fat, a daughter

of Rutela's Sheet Anchor, A. R. 22, and Imp. Comely 7642.

It is apparent that this bull is hard to beat. All his ancestors for three generations are in the Advanced Register class, the females with high records and the males are noted for the high records of their progenies.

A. B. HUMPHREY,
Sacramento County, Cal.

THE LEVER OLEOMARGARINE BILL WILL NOT PASS

The Live Stock and Dairy Journal— The following telegram has just been received from Washington, D. C.:

"Hon. F. W. Andreasen, Secretary State Dairy Bureau of California, San Francisco—Hearings and further consideration of oleomargarine bills and all matters relating thereto now pending before the Committee on Agriculture of the House have been continued until December 4, 1912, when the entire matter will be taken up and considered by the committee. This will give our people full opportunity to prepare in the meantime and have all data and facts ready and on file to submit to the committee for its consideration at the commencement of the hearings on the date to which it has been postponed. In the meantime I would suggest that you get things in best possible shape and forward me a full and complete statement in regard to the situation as it applies to California so that I may file it with the committee to be used in said hearing. If we are vigilant in this matter I am satisfied that our rights will be fully protected."

"JOHN E. RAKER, M. C.,
"Washington, D. C."

It is gratifying to learn that the Lever bill, which proposed to allow

the coloring of oleomargarine without restriction, will not pass Congress this session. But the oleomargarine manufacturers are tenacious and have by no means given up the fight. Should the bill be passed in December when it comes up again there is a danger that it will nullify our State laws and make them ineffective, owing to the peculiar rights and privileges of the original package.

It is hoped that the dairymen and live stock men will take steps to protect their rights and interests before it comes up again in December next.

F. W. ANDREASEN,
Secretary State Dairy Bureau,
San Francisco, Cal.

Get Our Prices

On Dairy Supplies, Irrigating Plants, Creamery and Cheesemaker's Equipment. We handle the best lines manufactured at the right prices. We have a wide acquaintance in Central California, and if you want to lease, buy or sell pasture, dairy land or stock, write us what you want, for we may know just the man you could make a deal with.

Make our store and offices your headquarters when in Sacramento. We will gladly answer your inquiries, and our knowledge is at your disposal.

We solicit consignments of Hides, Pelts, Tallow, Wool and Mohair. We charge no drayage.

J. N. BLAIR & C O.

Butchers' and Dairy Supplies,

1009-1011 FRONT ST., SACRAMENTO

HOLSTEINS

Two Hundred Purebred, Registered Cows, Heifers, Bull Calves.

We are offering for sale Cows and Heifers that will give from eight to twelve thousand pounds of milk per year. Many of them bred to our two great herd bulls, Sir Netherland Cornucopia and Prince Hengerveld Segls. The four nearest dams of these two great bulls average over 600 pounds of milk, 30 pounds of butter, 1 per cent fat, official records, for seven days. Conceded to be the two greatest bulls owned by any farm in the Middle West. Bull calves sired by these great bulls, some of them out of record cows.

Write us. Let us tell you more about this great herd. Quality considered, we price them right and guarantee every animal to be as represented.

WOODLAWN FARM
Sterling, Illinois

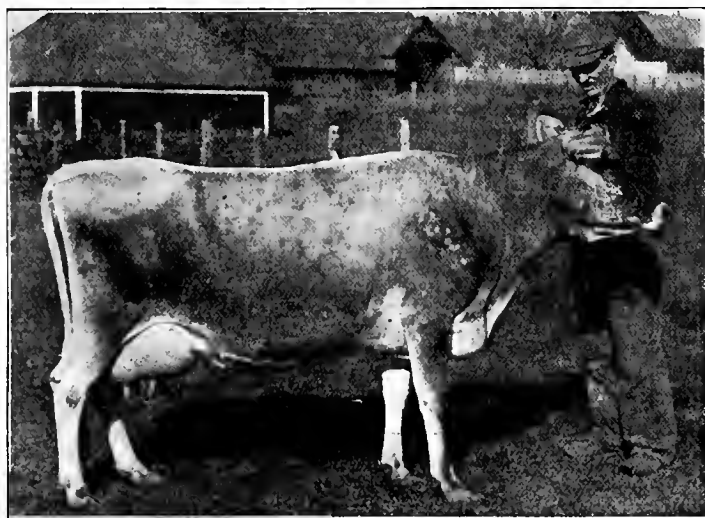
FOR SALE

A High Graded

Holstein Bull

One year and eight months old; from a Registered Riverside Bull that cost \$560 and a Holstein Cow with a strain of Jersey in her and giving over six gallons of rich milk per day. A chance to improve your stock at little cost. Price, \$100.

VINCENT C. SMITH,
Glen Olive, Napa, Cal.



Sunny Bank's

THIRD ANNUAL
SALE
of IMPORTED JERSEYS

MAY 21, 1912

Ninety---HEAD---Ninety

This is the Largest Herd of Imported Jerseys Ever Offered For Sale at Public Auction on the Coast. This Herd Was Personally Selected by Me on the Isle of Jersey and Shipped Direct to My Farm at Scappoose, Oregon. There Are Some of the Best Blood Lines of the Jersey Breed in This Herd. Such Blood as Golden Jolly, Flying Fox, Golden Fern's Lad, Majesty, Eminent and Other Noted Bulls Still on the Island.

EXHIBITION STOCK

As a Show Herd the Individuals Have Great Merit. These Animals Arrived in Oregon Ten Days Before the Opening of the Fall Circuit and Won Twenty-Five Firsts, Fifteen Seconds, Nine Champions Out of Twelve, and Five Grand Champions One Out of Six. The Calves of These Animals That Have Been Born During the Fall and Winter Show Equally as Good Merit. A Splendid Opportunity to Strengthen Your Show Herd.

MILK PRODUCTION

There are Many Heavy Producers in This Herd. Several of the Older Cows Have Passed the 40 Pounds Per Day Mark, and Many of the Heifers Passed the 30 Pounds Per Day Mark. All Cattle Over Six Months Has Been Tuberculin Tested by the United States Government, and a Certificate Will Be Furnished With Each Animal. Catalogue Ready May 1st. Write for same to

H. WEST

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Scappoose, Oregon

The Beautiful Ayrshire—"The Perfect Cow"

(Written for The Live Stock and Dairy Journal by C. M. Winslow, Brandon, Vermont.)

The Ayrshire cow, with her beautiful color, her perfect dairy conformation, her ability to return the largest possible amount of dairy product for food consumed, her happy combination of utility and beauty, entitles her to rightfully claim to be the "perfect cow." Her home surroundings in her native land all combined to develop and intensify the highest type of uniformity of the breed. This was particularly noticeable at the National Dairy Show at Chicago last fall when there were gathered into one barn and one show ring cows from widely separated States and countries, and as you walked down the length of the barn the cattle all looked as though they might have come from one herd and been bred by one man, so uniform were they in type and color. There were cows imported from Scotland, cows from Canada, cows from the states of Vermont, Connecticut, New York and Washington, all having one type, though coming from widely different surroundings.

The Ayrshire cow is a handsome, well built, sprightly looking cow of medium size, weighing about one thousand pounds, having a small, bony head, full bright eyes, forehead somewhat dished, broad muzzle, strong jaws, upright horns, slim neck firmly joined to head and shoulders, sharp withers, straight back from head to tail except a slight rise on the pelvic arch, ribs well sprung, giving abundant room for lungs and room to store coarse fodder.

As you look at an Ayrshire cow from the front or side she presents a marked wedge appearance. She is strong across the loin, has heavy hind quarters, slim thighs with hind legs wide apart, giving abundant room for a large, full udder which is strongly hung, running back and extending well forward under the belly. Her teats are of medium length, hanging straight and placed on the four corners of the udder. The milk veins are large and tortuous, entering the abdomen through two or more large holes well forward towards the forelegs.

She is a hearty, strong, rugged cow, with a good appetite, always hungry and not over particular as to the quality of her food. In the barn she eats greedily whatever is offered, beginning at the top and not stopping until the bottom is reached. Although she appreciates good fodder, still she does not turn up her nose at poor stuff, and in the pasture she does not hunt around for the sweet morsels, but goes immediately to work getting her fill of such as comes first—good grass, poor grass and browse—anything to fill up, and when full she lies down and chews her cud. She eats rapidly and chews rapidly, as though she had a large contract to fill and must lose no time in getting ready for the milking time. She is what you would call a dairy rustler.

Her milk is of good quality, averaging about 4 per cent fat, and in quantity about 10,000 pounds a year from officially tested cows in the mature class, and 400 pounds of butter. I think it would be a safe estimate to set the breed average at 7000 pounds of 4 per cent milk per cow and 350 pounds of butter.

While she is a strictly dairy cow, she is from her confirmation a profitable cow for beef when fattened, and, as the butcher says, she cuts up well, having heavy hams and thick loins. Her easy keeping quality and vigorous appetite make her take on flesh quickly when dry, and her meat is good color, well flecked with fat and always weighs more than her looks would indicate.

The Ayrshire cow has always been the poor man's cow, the family support, the mortgage lifter, but of late several men of wealth have taken a fancy to the beautiful spotted cow and have shown her at the leading fairs, which has rapidly brought her to the notice of the public.

Another thing which has been of much advantage to the breed in bringing them before the dairy world is the advanced registry system inaugurated by the association for conducting official tests through the supervision of the Experiment Stations in the State where the herd is located. While it has always been claimed that the Ayr-

shire cow was a great dairy cow, there was no absolute proof of her performance at the pail until this system was started. The result has been that supposition of her dairy ability has been more than substantiated by official records that show her wonderful dairy ability.

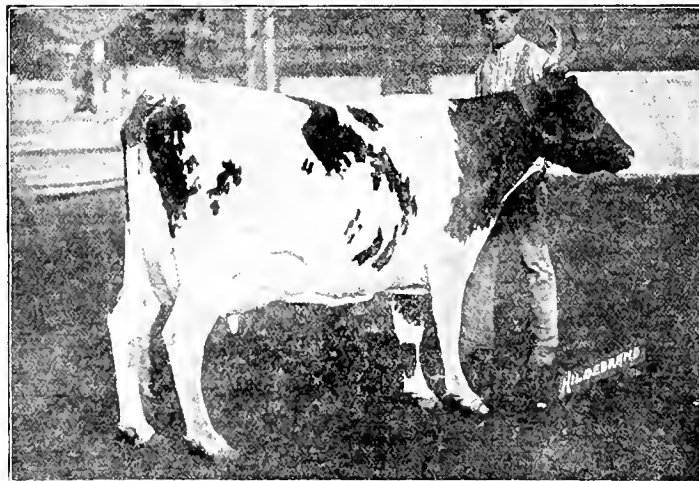
The method adopted is for yearly tests, believing that while a test for a week or a month is interesting in itself, it is no sure indication of the yearly ability of the cow. A cow must be fed and cared for during the whole year, and it is the whole year's milking

that determines whether she is kept at a loss or at a profit.

The average yield of the breed as determined by the official reports are:

	Lbs.	Lbs.
	Milk.	Butter.
For 2-year-old	7,487	365
For 3-year-old	8,835	407
For 4-year-old	9,695	444
For mature cows	10,246	467

The highest official record so far is for Netherall Brownie 9th, giving 18,110 pounds of milk and \$20.91 pounds of fat (equal to 958 pounds of butter). It looks as though the 20,000-pound Ayrshire cow is not far distant.

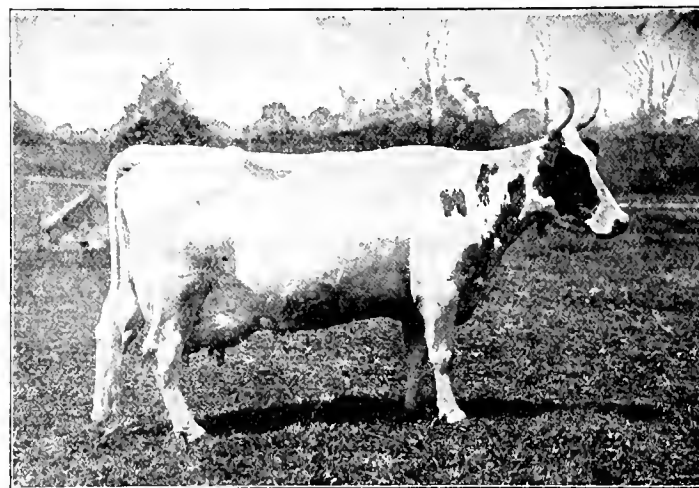


OLDHALL LADYSMITH 4TH (24669).

Ayrshire Cow Who Was Grand Champion Cow Over All Dairy Breeds at National Dairy Show. Winner of \$500 Trophy Over All Breeds, Chicago, 1911.

PUREBRED GUERNSEY HERD.

A. B. Humphrey, of Grape Wild Farm, Sacramento County, has laid the foundation for a splendid herd of Guernseys. Mr. Humphrey has had a herd of purebred and grade cattle for some time, but from now on will keep purebreds only. As will be noted from his letter in this issue, he has brought out from the East a young bull that will head the herd, and the youngster has blood lines that are not surpassed in the great Guernsey families.



AUCHEMBAIN WHITE BEAUTY (21687.)

Milk Record, 13,789 Pounds in One Year. Butter-Fat Record, 564.39 Pounds in One Year. Owned by Percival Roberts, Jr., Narberth, Pa.

MAKING WELL-BALANCED UDDER

Many cows carry unbalanced udders; that is to say, the different quarters of the udder yield a differing quantity of milk. The udders show this also in their shape. D. M. Shontz, in the National Stockman, relates an interesting experience in this particular and states how he balanced up the udders of his cows:

"Cows' udders can be developed at any age, or, rather, light quarters or sides of a cow's udder can be made to give an even amount of milk with the side opposite. This we have proved to our satisfaction on several occasions. The process we rather blundered on several years ago when we had a cow come fresh that had one side of her udder much more developed than the other, and had been giving more milk from this side. We let the calf suck the light side, and milked the other, but not all out; left perhaps a pint or more in each full teat. This we did three or four times. After four or five days I took the calf off and was surprised to find the cow's udder even.

"The only difficulty in this process is to get the calf to work on the right teats. If the calf begins to work on one side of a cow it very soon learns to take certain teats first. By this experience we could only say we thought we had discovered something, but after a few years we had a cow drop a dead calf. This one, not having any calf to interfere, we could handle as we wished. She had the teats opposite diagonally much larger than the others—perhaps gave one-third or a half more milk than the others. We treated her the same way, stripping the light teats quite dry and leaving milk in the full teats. This udder was also very well balanced up by the process and remains so.

"Another cow fresh last spring was balanced also by the same usage. We think the enlargement of certain quarters of a cow's udder comes from the activity caused by the calf first sucking on these quarters. The sucking, like the manipulation, brings more blood and force to produce milk to the parts so handled."

If Mr. Shontz's theory is correct that the disproportion of the quarters in the udder is due to the manner in which the calf sucks, it would seem advisable that with a heifer's first calf it be taken away after sucking, say twice until the colostrum in the milk was exhausted.

We give publicity to this experience of Mr. Shontz in the hope that a number of our readers will make some experiments with it.

Woodlawn Farm, Sterling, Illinois, has an advertisement in this issue offering two hundred choicely bred registered Holsteins for sale. This farm is one of the big Holstein breeding establishments of the United States, and it will be well for those contemplating the purchase of Holstein blood to correspond with them.

The Lampenheim Creamery at Hardwick has been turning out an average of 1800 pounds of butter daily for the past year. Manager Haas reports that there is a steady growth in the dairy business in his section. The creamery now has 135 patrons.

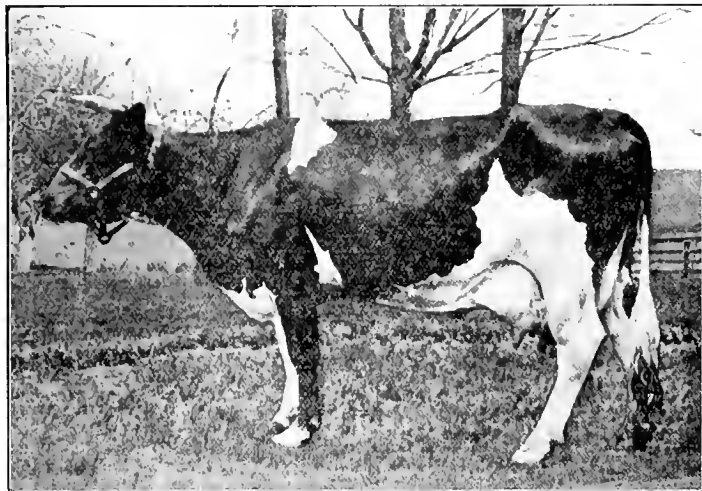
New Queen of the Dairy World

With a record of 1058.34 pounds of butter-fat produced in 365 days, Banostine Belle De Kol, a 5-year-old Holstein-Friesian cow owned by Dan Dimmick & Bro., of Ohio, becomes the new "Queen of the Dairy World." This wonderful cow produced during the year 27,404.4 pounds of milk testing 3.86 per cent fat. This means over nine gallons of milk per day, or enough to supply thirty-six families each with a quart of milk daily. If made into butter, her fat production would equal 1322.925 pounds of butter, or over three and one-half pounds per day for 365 days. This is all the more remarkable because it was made without her being dry at all before freshening. No other cow in the world has ever produced such an enormous amount of butter-fat in a yearly test and only one other has ever exceeded Banostine's milk record.

fresh roots were not available. Her grain ration from the first was gradually increased to 25 pounds, or a little more, but later reduced to as low as 9 pounds per day. As near as can be estimated the average amount of grain fed was 12 or 14 pounds daily. She also received, when it was available, green corn with the stalks and also green clover and any other green feed that might be available, including feed from the pasture.

Banostine Belle De Kol has given birth to three calves, this record having been made after the birth of the third calf. All of her calves to date have been heifer calves.

Dimmick & Brother have in their herd two other cows, stable mates of Banostine Belle De Kol, all daughters of the same sire, that have made excellent records. Daisy Grace De Kol holds the world's junior 4-year-old rec-



BANOSTINE BELLE DE KOL.

New "Queen of the Dairy World." Owned by Dan Dimmick & Bro., Ohio.

The official records of Banostine Belle De Kol are as follows:

Days.	Milk.	But.	Fat.	But-Fat.
7	672.5	3.67		24.697
30	2,828.0	3.50		98.987
60	5,505.0	3.53		194.053
90	7,856.8	3.61		283.543
*7	492.1	4.31		*21.195
365	27,404.4	3.86		1,058.34

*This seven-day record was made eight months after freshening.

Banostine Belle De Kol was bred, reared and developed by Dimmick & Brother at the Maplecrest Farm. She is a strong, vigorous cow of wonderful capacity, and will weigh in the neighborhood of 1600 pounds. She is the daughter of Banostine Belle, who was a grand-daughter of Euphrasia A, one of the greatest foundation cows the breed has ever produced. The sire of Banostine Belle De Kol is Friend Hengerveld De Kol Butter Boy, all of whose A. R. O. daughters have records of 20 pounds or more. Friend Hengerveld De Kol Butter Boy is a son of De Kol 2d's Butter Boy 3d, and is showing himself to be the greatest son of that great sire.

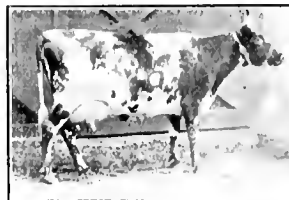
During the time Banostine Belle De Kol was in test she received nearly, if not all the time, more or less ensilage and alfalfa. When available she received roots and a mixed grain ration, the foundation of which was bran and oats. The heavier feeds were varied frequently, according to the condition of the cow, and that which seemed best at one time did not seem best at other times. She was also fed some dried beet pulp, especially when

ord of 962.795 pounds of fat and 21,718.3 pounds of milk produced in 365 days. High Lawn Hartog De Kol has a yearly record of 998.340 pounds of fat and 25,592.5 pounds of milk. These three Holstein cows have produced a larger amount of butter-fat in one year than any other three cows the world has ever produced, their average production of fat being 1006.49 pounds, which is equal to 1258.11 pounds of butter 80 per cent fat.

These tests were made under the careful supervision of the Dairy Department of the Ohio State University. The cows were tested by nine different persons, and were watched at times day and night so that the records are fully verified.

PROFESSOR OSCAR ERF,
College of Agriculture, Ohio State University.

Mr. H. B. Goecken of Livermore, Cal., has made application to the Panama-Pacific Exposition Commission for the privilege of erecting a building which shall be a faithful reproduction of a Friesland dairy home. The specifications call for a building to cost not less than \$5000. It is planned to house an excellent herd of Holstein-Friesians in this building during the 1915 Fair, with real dairymaids from Friesland in attendance. The milk will be sold to Fair visitors, and besides any money making value the idea may have, it will be one of the greatest advertisements of the Holstein-Friesian breed ever put before the public in the West.



DAIRYMEN ATTENTION!

We can supply you with

AYRSHIRES

Best blood in the West. Bulls, cows, heifers and calves. Our service bulls were sired by Grand Champions. Write for pedigrees and prices.

BROWN & BRANDON,

Petaluma,

California.

Attention Breeders and Dairymen!

Are you in need of a herd sire? We are offering the choicest lot of

HOLSTEIN-FRIESIAN BULLS

ever offered in the State. Several Eastern bulls sired by Korndyke Queen De Kol's Prince, the sire of four daughters that average 30.22 pounds of butter in 7 days, and one with 1000 pounds of butter in one year. Also have a few bull calves by our herd sire, King Segis Pontiac Emperor, who is a grandson of Pontiac Clothilde De Kol 2d, and his dam a full sister to King of the Pontiacs. Will have some cows and heifers for sale later.

A. W. MORRIS & SONS
WOODLAND, CAL.

HOLSTEIN BULLS FOR SALE



Holstein Bulls that are bred in Great Sire lines. We have eight young Bulls that carry the blood of the greatest mothers of the breed. Hundreds of cows showing a high production of butter fail to produce sons that are successful sires. Bulls carrying the blood of Belle Korndyke, Canary's Mercedes, Beryl

Wayne, De Kols 2d and Aggie Cornucopia Pauline have never failed to breed on.

Write for extended pedigree and prices.

Live Stock Importers and Breeders of Purebred Holsteins.

HEENAN & WELDON

:: P. O. Box 365, Sacramento, Cal.

HOLSTEIN-FRIESIANS

WOODCROFT FARM, PUEBLO, COLORADO.

Offers for sale a 3-year-old son of Pontiac Korndyke, and eight sons, 4 to 16 months, from A. R. O. dams. Also five A. R. O. cows and five yearling heifers bred to him.

LAND

In San Joaquin Valley. Can be had at right prices. Write

WING & TURNER

Visalia :: Tulare Co., Cal.

Geo. A. Smith Closing Out Sale

Corcoran, Cal., May 18, 1912

Having Leased My Farm for Five Years, I Will Sell at

PUBLIC AUCTION

60 head of Registered Jersey Cows, Heifers and Bulls, including 10 sons and daughters of World's Champions and 16 grandsons and grand-daughters of World's Champions. Every Cow and Heifer old enough to breed is either fresh now or coming fresh in a few days after the sale.

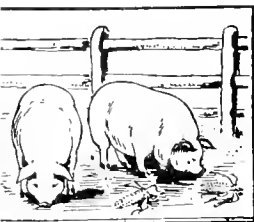
10 head of Imported and Home Bred Registered English Shire Horses, Mares and Colts; 40 head of Work Horses, brood mares and colts. This stock is extra good. One team of heavy Mules, one 4-year-old Stallion, half English Shire and half Percheron.

75 head of Registered Poland China Hogs, all ages and both sexes, from Ohio, Illinois and Missouri stock.

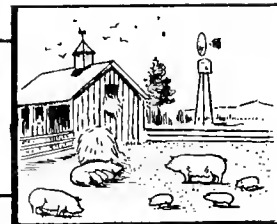
Some of the very cream of these breeds will be sold without reserve and without regard to cost or value.

REMEMBER THE DATE—MAY 18, 1912. WRITE FOR CATALOGUE.

George A. Smith.



THE SWINE HERD



Weaning The Pigs

A critical time in the development of the pig is when they are taken from the mother, for if they stop growing then, even for a short time, the effect is quite noticeable, for a stunted weanling never fully recovers.

The articles below are from representative swine breeders whose methods are worthy of consideration. The Journal would welcome letters on the same subject from other swine breeders, and will gladly give space to all that are sent in. Readers should remember that there is much to be learned through exchange of ideas, and each should do his part in telling his experiences for the benefit of his fellow swine raisers.

Wean Without Retarding Growth.

The most important thing in weaning pigs is to do it without retarding their growth in the least. Begin to feed them at about one month of age, or as soon as you can get them to eat. Fix up a small pen with a low trough and regular little stalls with just room enough for one pig to a stall. Have an entrance to the pen only large enough for the pigs, and thus prevent the sow from fighting them away from their feed. Have the entrance close to the feed trough of the sow, for as the pigs begin to want to eat they will naturally go to the trough of the mother and she will root them out. By putting a little feed in their trough first a few times you will always find them in their stalls waiting for their meals. Feed three times a day all they will eat up clean in about one-half hour, of some food that is rather rich in protein—skimmed milk and middlings, with a little soy bean meal makes a good feed. Wean when about eight or ten weeks old. Do not take the pigs from the sow, but take the sow from the pigs and make the pigs as comfortable as possible for a few days at least. Keep them stuffed so they will not think of hunting the mother, then if you should want to remove the pigs to another pen you can do so after about one week, and they will be perfectly at home as long as they are not hungry the first few days. At all times they should have plenty of exercise, a good bed of clean straw—not dusty hay or trash.

They should also be kept free from lice. About the easiest way to rid them of lice is to take a sprinkling can with a fine sprinkler, fill with stove distillate, corner the pigs together and sprinkle them until the distillate begins to run down their sides. Then their climbing over each other will rub it around and finish the job. Keep the pigs out of the sun for a few hours and there is no danger of blister. Repeat this in ten days and the lice are done for.

If these principles are carried out you should not fail to have fat, sleek and healthy pigs.

L. R. MCCOY.

Stockton, Cal.

Best to Wean All at One Time.

In weaning pigs I have found it best at all times to wean them at the age

of eight to ten weeks. The pigs of tried sows may be weaned at eight weeks if they are healthy and hearty, but if they are not strong and healthy it is best to let them stay with the mother another week or so. Never wean the pigs of a gilt until they are ten weeks old, as it is very seldom that they are as strong and hearty as the pigs of an old sow, and they will have a better show of holding their own. They will not get stunted so easily if they stay with the mother ten weeks, and naturally it will take less feed to make hogs out of them.

Some hog raisers, in weaning pigs, take away all but one or two of the smallest pigs, which they leave with the sow so that she will not fret so much, also to dry her up easier, but I think it is a very poor policy, for when the one or two that are left with the mother want to nurse the sow will naturally try and call the remainder of the litter and they will worry and try to get where she is. I find that it is best to wean them all at one time, and never let them out until the sow is dried up.

Never put the litter you have just weaned in a corral or lot with other pigs until you have had them away from the mother for a week at least, for those bigger pigs will run them and fight them and have them afraid to go up to the trough to eat, and after a few days you will have a stunted pig or so, and, of course, that means more feed to take care of that stunted pig and more work. After the little fellows are taken away and put by themselves fresh water is necessary three times a day. Also feed them three times a day for ten days.

F. R. WILLIAMS.

Monrovia, Cal.

Weaning the Pigs.

This is one of the most essential topics and the most neglected one. We have found in a great many places the young pigs put out into the world to shift for themselves from one to two months earlier than they should be. I find by preparing the pigs for this, one must commence when they are about two weeks old. Give the sow regular feeding and plenty of range. Do not change her feed. Keep her on as nearly as possible the same rations, only increase it as the pigs grow older. When they are in uniform shape for weaning, change the feed of your sow to dry, plain feed. At this time the pigs are grazing for themselves. The change in the feed makes them dissatisfied to some extent. It is an easy matter to get them by themselves while doing this. Be careful not to over do. We all know a pig's failings. Educate your pigs up to proper and regular feeding. Do not give them at any time all they can drink. By over doing, your little pigs lose vitality and the first thing you know you have stunted, over fed shoters. They will squeal around the pen looking for more all the time.

W. W. WETTMAN.

Turlock, Cal.

TO REGENERATE HIS MAJESTY, THE PIG

To begin with, in any live stock, we must have as good as we can obtain of either sex.

We will suppose that the grand old sow has just weaned her litter of romping big fellows, and she is in fair condition under the circumstances. We have a boar with which to mate her that possesses strong points where she may happen to be weak.

After cutting heavily on her ration for a few days until the udder has begun to shrivel, feed her enough strength-giving food to gradually build her up in flesh. Thus she is in the best possible condition to start the development of another strong litter. This increase in flesh should continue very slowly up to the time of farrowing, when she should be carrying enough flesh to be strong in every way. This condition can best be obtained by judicious feeding and regular care under the guidance of a scrutinous eye. Abundance of exercise and flesh-forming foods must be used, cutting out fat-forming substances that make her majesty lazy.

In this form she will farrow to her full capacity, and they will be long, muscular fellows, ready to fill out and grow from the start.

The first twenty-four hours after farrowing is a very critical time, and many a litter has been ruined by the old adage, An ear of corn to each pig. Give nothing this length of time but clean water, leaving her the after birth to dispose of in her own way. Heavy feeding from the start produces more milk than the little stomach can use, and causes fever of the udder and scours the pigs.

Twenty-four hours gone and we begin with a very small amount of milk and middlings or water and middlings very thin and not more than a quart. Give her a liberal ration of tender alfalfa or grass, which is cooling and will keep her full and contented. Gradually increase her condensed ration until at the end of three weeks. If she has as many as five pigs it is not likely that she will give more milk than they will take. The more mother's milk they get from this time on to weaning the better their first epoch in life.

At four to six weeks of age they begin to crowd in to eat with the sow. Then fix them a creep and begin to feed them where they are safe from the knocks of larger animals. Begin this slowly also, as this is the second danger period for scours and a grand chance to stop or check their splendid development.

At from two months to ten weeks old they have distended their digestive apparatus sufficiently to warrant capacity for plenty of good, nutritious food to continue their excellent development.

By encouraging the use of plenty of exercise and succulent greed food to distend the digestive organs we are constantly building on and broadening a strong frame which is bound to develop into an animal of better proportions than the average of its ancestors.

Yours for constant improvement in our live stock. C. L. THORNTON.

YOU CAN'T AFFORD

TO USE ANYTHING BUT

A PURE-BRED BOAR

at the HEAD OF YOU HERD,

Because

He is just half the herd, and the increased number of pigs he will get will more than pay his cost. Did you ever

Stop

And consider that with a pure-bred boar and ordinary sows you can build up your herd to ¾ bloods in less than two years?

Registered Duroc-Jersey Boars---Ready For Service

Of August and September farrow, weighing from 150 to 200 pounds.

\$25 to \$30

FOR IMMEDIATE DELIVERY.

Swineland
Box 161. YUBA CITY, CAL.

O. I. C.

THE BIG WHITE HOG.

Two hundred and fifty to 300 pounds at 8 months. Best and largest herd in the State.

Write us your wants. We can fill them. All our stock is registered.

STUDARUS & CUNNINGHAM
MILLS, CAL.

RED DUROC HOGS

Best Bred Stock Now in California

YOUNG STOCK AND SERVICE BOARS AND SOWS FOR SALE

All registered pure-breds, and from such sires as Wonder and Klondike. New Importations from Missouri and Indiana. We are located in the Imperial Valley, and are here to supply California, Oregon and Arizona breeders. Write for prices and pedigrees to

MOORE BROS.,

Box 202, El Centro, Imperial Co., Cal.

Properly Feeding the 1912 Shotes

The time of year has arrived when we are ready to wean our 1912 crop of pigs. Whether we have few or many has depended upon our care of the brood sow and the little fellows the first month of their lives.

To the serious minded hog raiser the problem that confronts him is, how to best handle them in order that the greatest net returns can be secured. With all feedstuffs as high in price as they are now, it is a problem of no small importance. The solution by many is to turn the sows with their litters out on a good range with little or no grain and let them rustle for a living. This, however, is unsatisfactory because through lack of proper nourishment many of the pigs become stunted, while others die due to lack of proper feeding, and pigs handled in this manner are seldom large enough to put into the feed lot before they are 10 or 12 months old, and after two months in the feed lot many do not reach the 200-pound mark.

The digestive tract of the hog is small in comparison to that of the sheep, cow or horse, and is not adapted to living on grass alone, even though it may be the best alfalfa past-

1 cent per pound for every pound of gain, it is costing 2.88 cents, while during the tenth, eleventh and twelfth months he is putting on only 50 pounds gain in three months, and eating at the rate of 7½ pounds of grain per day, the cost of a pound of gain with grain at 1 cent a pound is 13½ cents. Hence, from an economical standpoint, it is to the grower's advantage to feed liberally from the start and put shotes on the market at 8 months of age, weighing from 200 to 250 pounds. This can be done by feeding a medium grain ration with good alfalfa pasture.

Mr. Snyder of the Nebraska Experiment station grazed three lots of 47-pound pigs on alfalfa pasture during each of two summers. One lot received a light, the second a medium and the third a full allowance of grain, and he concludes that a light grain allowance on alfalfa pasture is not economical food for growing pigs unless alfalfa is abundant, grain high in price and market conditions warrant holding the pigs. It is usually more profitable to feed two pounds or more of grain per 100 pounds of pigs than to feed a lighter ration.

Skim milk is a valuable feed for

seven weeks, then reduced to .45 pound during the next four weeks, and then during the following seven or eight weeks they should be fed .5 pound digestible crude protein per hundred pounds live weight daily. Following this there is another four weeks period of reduction from .5 pound to .35 pound and then another seven or eight weeks period of feeding .4 pound. Thus the reduction continues till the hog reaches maturity at 2 years of age, when only about .2 pound of digestible crude protein is necessary as a daily allowance per hundred pounds live weight.

As stated in circulars 126 and 123, the market pig when it is 2 months old gets .6 pound of digestible crude protein daily per hundred pounds live weight. This is gradually increased during the next seven weeks to .7 pound. Following this there is a reduction from .7 to .6 pound during four weeks time. During the next seven weeks the pigs get .65 pound of digestible crude protein daily per hundred pounds live weight. This is reduced to about .3 pound during the next four weeks, at which point it remains constant till the pigs are in prime condition for market when 8 months old.—Illinois Circular No. 153.



Group of Hampshire Swine Ready for Market.
Owned by Frank Reed Sanders, Mesa, Arizona.

ure. Conclusive experiments carried on at the Utah Experiment Station show that pigs weighing from 60 to 75 pounds placed on pasture alone made an average gain of only 0.2 pounds per day, while with a full grain ration on pasture average daily gains were 1.2 pounds per day.

All experimental records show that the younger the pig the cheaper the gains, and Professor Dietrich of Illinois has shown that it is possible to secure a weight of 100 pounds at the end of four months. During the fifth, sixth and seventh months 50 pounds gain is secured each month, while it takes two months, the eighth and ninth, to secure the next 50 pounds gain, and the next 50 pounds gain three months—the tenth, eleventh and twelfth.

The average amount of feed eaten daily ranges from 2.2 pounds for a pig weighing from 15 to 50 pounds to 7.5 pounds of feed for a pig weighing from 250 pounds up.

A pig at five or six months of age will eat 4.8 pounds of feed per day. If at this time he is putting on 50 pounds of gain per month with grain at

growing pigs when fed in combination with carbonaceous foods as barley, corn or wheat.

A rule given by Hoard for finding the money value of skim milk when fed to fattening hogs is in substance:

"To find the value of 100 pounds of skim milk when fed alone multiply the market price of live hogs in cents per pound by five; if fed in combination with barley or corn, multiply by 6."

O. D. BAKER.

PROTEIN FOR PIGS.

The indications are that pigs which are to be developed for breeding purposes should be fed less protein per hundred pounds live weight daily than those that are intended for market. The experiments seem to show that pigs which are to be developed for breeding purposes should start with .5 pound of digestible crude protein daily per hundred pounds live weight when 2 months old. This should be increased to .35 pound during about

The Live Stock and Dairy Journal—My sow Columbia's Model 3rd, farrowed eleven live pigs on the 16th of April. Her former litter was farrowed Sept. 17, 1911, and she had twelve at that time.

I took a trip to Sonoma County last week, but was glad to get back to the Sacramento Valley, as it looks better to me every time I go out to some other part of the State. I guess the country and location and the people behind it are what make The Live Stock and Dairy Journal the best paper of its kind published.

Enclosed please find one of the Purebred Sire League cards filled out. I think this movement is the best that has ever been started in the interest of the live stock industry.

H. L. MURPHY.

Sacramento County.

A successful dairyman recommends thorough massaging the caked udder with lard and turpentine, applied two or three times daily until hardness disappears.

KOKOMO

Kokomo quality means the kind

Of Woven Wire Fencing that will

Keep taut in all kinds

Of hot and cold weather, without

Making expensive repairs

Or replacement each year, which

MEANS

Quite a big saving. It is

Universally used in the U.S.

Among farmers, stock raisers and

Land owners who appreciate merit.

It will be to your benefit

To investigate our fencing.

You should always remember that

QUALITY

comes first—price second

California Anchor Fence Co.

810 Main St. Stockton, Cal.

Duroc Jersey Swine

Champion herd of California, and champion 6 months boar of Oregon heads my herd of glits from which I expect great results. Young stock, both sexes, for sale at right prices. Booking orders for February pigs.

J. K. FRASER,

DENAIR, CAL. San Joaquin Valley.

Knob Hill Stock Farm

REGISTERED POLAND CHINA SWINE

Stock of Various Ages, Both Sexes
For Sale

A. M. Henry, Proprietor Farmington, Cal.

LOCUST GROVE FARM

BERKSHIRES

Bred for Size and Quality. Herd Boar
Kennett 106045

RIPON, CALIFORNIA

HILLMONT FARM

High-Class Registered

BERKSHIRE HOGS

Write for Information or Come
and See.

CHAS. GOODMAN, Williams, Cal.

S. B. WRIGHT

SANTA ROSA, CAL.

BERKSHIRE HOGS, DORSET SHEEP
TROTTER HORSES

Breeder of Sonoma Girl 2054
Charley Belden 208½, etc.

Farm 2 miles west of Santa Rosa on the
Electric Railroad. Fare, 5 cts.

THINKS THE BERKSHIRE THE BEST HOG.

The Live Stock and Dairy Journal—Since writing for the Journal a few items of our own experience and of small items that I have seen put into practical use, I have been getting letters asking what to do in certain cases of swine ailments, and how to take care of swine. I want to let the readers of *The Live Stock and Dairy Journal* know that I am neither a veterinarian nor professor. If they would write to the editor of *The Live Stock and Dairy Journal* he would be glad to answer their questions in the Veterinary Department. Then thousands of stockmen and farmers could learn something regarding ailments.

After reading in the *Journal* how various farmers and breeders claim their breed of swine is the best, I will tell you why I like the best hog in the world, the Berkshire.

If you want a hog that can be easily fattened for market at any age or fed to any reasonable weight, say from 600 to 800 pounds; if you want a hog whose flesh is of the best flavor and contains a larger proportion of nicely marbled lean and fat than that of any other breed; if you want boars with power to transmit their best qualities to their progeny; if you want sows that are unsurpassed in prolificacy and are careful nurses and good sucklers; if you want pigs that are strong, active and vigorous from birth and less liable to little mishaps that so often occur; if you want hogs that have strong powers to digest and assimilate their food, returning to you the maximum quality of flesh and fat at a minimum cost; if you want an attractive herd, uniform in size and color markings; in fact, if you want the very best, get the Berkshire.

JOSEPH LEVY.
San Joaquin County, Cal.

POLYPUS IN HOGS.

A growth known as polypus is often found in large hogs. It starts in the nose and then drops backward and closes the air passages, thus having a tendency to stop breathing, and often the hog dies without the owner knowing what the trouble is. In most instances the growth is of a soft, spongy nature, which can be reached and cleaned out with a long wire bent to form a hook on the end.

A hog afflicted with a polypus will refuse to eat for several days, then gag and stagger, lie down and breathe heavily, taking only short breaths.

PORK PRICES.

The price of pork hogs has been slowly advancing here as well as in other parts of America until our market has a range of 7 to 8 cents, while in other parts they are higher. The outlook now will be for one year of higher prices until more hogs have been raised, as large grain crops means more hogs unless the ravages of cholera are unchecked.

Cholera and high priced feed has done more to make hogs scarce than any other cause.

About the only feed that has been suitable to produce pork at the prices received for the past year has been milk, alfalfa and waste fruits.

Our much-needed rains have come so plentifully that we are assured of large crops of grain, alfalfa and fruit, and this means a large crop of good hogs.

G. A. MURPHY.

Regularity of milking is an essential matter, and the farmer who pays no attention to this point cannot get the best out of his dairy stock. Cows are uneasy after milking time, and give down less milk.

A PROCESS FOR CURING MEAT.

A writer in the *Berkshire World* says that after trying various methods for curing meat, he finds a process that he considers most satisfactory because so many people object to the exceedingly salty taste resulting from many methods. He says:

"Weigh the meat when cut ready to salt and use $2\frac{1}{2}$ to 3 pounds of dry salt to the hundred pounds of pork. Rub salt over well and lay when convenient on a table, skin side down, and leave lay till salt all goes in and your meat is ready to hang up and smoke. The whole process can be completed in from three to four weeks, or the meat can be left lying on the table till spring. It is preferable to smoke as soon as it can be done and the meat put away as the case with all meat when left unsmoked. The salt keeps it damp, and the outer surface will become covered with mold, but this does not hurt the meat in any way.

"In addition to the salt, when one wants to sugar cure their meat, as many do and as I do myself, I simply rub all the brown sugar on to the flesh side of the meat that I can get to stick, and then put on the salt as aforesaid. After the meat is smoked I find that the best way to keep it from being spoiled by flies or other insects is to sprinkle it all over with powdered borax, which is perfectly harmless to the human family and yet serves the purpose so well of outdoing all meat destroying insects. In a test conducted by us last summer when a large shoulder was cut through the center and one-half was hung out where all insects had free access to for six weeks, when this piece of meat was taken down, not a speck of anything could be found on it. This test was made during the months of July and August.

"Another advantage of using the powdered borax is that the meat does not have to be kept in a dark place, but keeps perfectly anywhere so long as it is kept dry.

"No one needs to be afraid to try this method, as I have tried it out very fully and have never had a pound of meat to spoil for me when cured this way. I sell all of my meat when cured, it going to the very finest city trade who gladly pay me the very highest market prices on account of it not being so salty and its splendid keeping qualities. My trade is increasing so much each year that I am unable to keep the supply up to the demand without any canvassing on my part, they coming from sixteen to twenty miles in automobiles to get my meat."

THE YORKSHIRE.

A California breeder writes us that the success of the Yorkshire hog is still a problem in this State. He says:

"I still think the Yorkshire is the greatest bacon hog on earth, and if kept up and fed they have no equal, but for a ranger I did not find them just what I had expected. They have cost me too much to fit for market.

It may be my fault, for in the Middle West they have won all the blue ribbons."

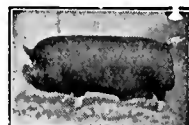
The *Live Stock and Dairy Journal* would like to hear from any other parties who have had experience with Yorkshires in California.

J. W. Benoit of Modesto has a new advertisement in this issue announcing that he has purebred O. I. C. hogs for sale. Mr. Benoit has a splendid herd, having recently added some boars and sows brought out from Ohio.



FOUR OAKS STOCK COMPANY

Woodland, California



BREEDERS OF BERKSHIRE, HAMPSHIRE AND
POLAND CHINA HOGS.

Their breeding is as good as it is possible to obtain. Since selling our herd boar, Double Premier (88215) to Mr. A. B. Humphrey of Mayhews, Cal., and Kennet (106045) to Mrs. C. E. Byrns of Woodland, we have put at the head of our herd Ravenwood Longfellow 10th (136430), assisted by Holt's Longfellow, a son of Double Premier (88215). We also have a Double Black Robinhood boar to breed our twenty head of Double Premier gilts to for spring farrow. A few of our mature sows are Ravenwood Duchess 92d (140527), Trixie M. (120796), Star 3d (120795), Royal Lady 10th (121407), Berrys' Eclipse (151956) whose sire sold for \$1000 this fall; Belle Wilts 14th (113497), Lady Premier 3d (106046) and Woodland Lady Premier (144095)—the best one we ever raised; sired by Kennett (106045).

Correspondence promptly answered. Our prices are reasonable for quality of stock.

DUROC JERSEYS AT MODESTO

BOARS, SOWS AND YOUNG STOCK FOR SALE.

Registered Duroc Jerseys. No better anywhere. Write for prices. Have stock for immediate delivery. Address:

JOHN P. DAGGS

BOX 5 R. F. D. 5 (One Mile North of Town), - - - MODESTO, CAL.

Poland Chinas and Berkshires

The California Polytechnic School has for sale some well bred Berkshire gilts in pig to Ames Rival 5th (135041) and Baron Geronimo (153625). Some well bred Poland China gilts in pig to Hillcroft Hero II (61369). Choice young boars of both breeds coming on.

Address:

CALIFORNIA POLYTECHNIC SCHOOL.

Animal Husbandry Department.

SAN LUIS OBISPO, CAL.

REGISTERED POLAND CHINA SWINE PRIZE WINNERS

Finest Stock in the State from \$30 up

M. BASSETT, Breeder

HANFORD, CAL.

SUNNY SIDE STOCK FARM BERKSHIRES

Young Stock from Blue Ribbon Winners For Sale

G. A. MURPHY

PERKINS, CAL.

Quality Berkshires

Oak Grove Berkshires are the large, growthy, vigorous, money-making type. They carry the blood of Masterpiece, Black Robinhood, Silver Tips, Premier Longfellow and Empress. names that mean quality wherever Berkshires are bred.

We are able to quote you the best Berkshires at the cheapest prices.

Further information cheerfully given.

Oak Grove Dairy Farm, Woodland, Cal.

The Live Stock and Dairy Journal— We are in receipt of a letter from I. M. Fisher, Secretary of the National O. I. C. Chester White Record Association, in which he states that the association has decided to offer a list of special prizes in the White Swine class, O. I. C. and Chester White, at the coming State Fair, under the following classifications:

Best boar under 6 months, best sow under 6 months.

Best boar under 12 months and over 6 months, same for sow.

Grand champion boar, same for sow. All stock to be registered with the N. O. I. C. Association prior to entry.

There are a good many White breeders in the state, and it is easy to make converts. All who are interested in showing White stock at the State Fair this year should write Mr. Fisher for particulars, at Hastings, Neb.

We have some very fine individuals, and may possibly show some this year. The only drawback is that for show purposes one has to get the stock too fat, and a good boar or sow is often ruined that way. If it were possible to show stock in good breeding condition, we believe that a great many more people would be willing to exhibit.

STUDARUS & CUNNINGHAM.
Sacramento County, Cal.

Kennedy Brothers of Merced, Cal., are out with a new Tamworth announcement in the Swine Department of this issue.

Joseph Levy, manager of Locust Grove Farm, reports that old Kennett his champion Berkshire boar, is still sireing large litters. Six sows bred to him farrowed ten pigs each in the past two months, and Mr. Levy thinks it a significant fact that every sow should farrow the same number of pigs. They are a splendid, even lot of pigs. Kennett's get won everything in their classes at the State fair last year in competition with Eastern-bred pigs. Mr. Levy states that they will have some great pigs for May delivery at \$15 each and also some sows and gilts, bred to Kennett and Baron Bachelor at \$30 to \$75 each.

YOLO BERKSHIRES TO HONOLULU

The Live Stock and Dairy Journal— We have sold to the Oak Grove Dairy Farm five sows and a boar, and we can tell you that the ones that take the ribbons away from them at the next State Fair will know that they have been to a hog show.

We sent one boar and ten gilts this morning to Honolulu, Hawaii, and they were not to be grinned at. This makes fifteen head of Berkshires we have sent to the islands in the past two months.

FOUR OAKS STOCK CO.
Yolo County, Cal.

THE BENEFICIAL INFLUENCE OF GOOD STOCK

There is no question but that the possession of the better grades of live stock exercises a great influence upon the owners. Few men take the interest in common stock that they do in purebred stock. It is impossible to become very enthusiastic when breeding without any definite aim or purpose—without an ideal, for ideals cannot be attained without blood lines that are fixed and known. Many a man's real interest in stock farming dates from the time he acquired purebred animals. Better stock usually induces better care and better feeding, and almost invariably means a better bank account.

PROVIDE PLENTY OF CLEAN, COOL WATER FOR THE HOGS

The season of the year has arrived when water must be provided for the hogs. Clean, cool water costs nothing but the pumping and distributing, and must be had to successfully produce live stock. It costs less than any food that goes into the hog's stomach, and for that reason but little attention is paid to providing it.

I am feeding a bunch of pigs with slop composed of middlings and water. After the pigs have their breakfast I turn them out on grass. They go direct to the water trough to get a drink of clean water after having drank considerable with their feed. No matter how much liquid they are fed they need the clean water to satisfy them.

To provide this water I have an iron trough 6 feet long at the end of the horse trough, with a small stream running into it all the time. This keeps it clean and cool and the trough full.

I do not like a wooden trough for this purpose, and for temporary use prefer iron, but if permanent would use cement. Those who are using wooden troughs would do well to put a lump of lime in them occasionally, also a little sheep dip or stronger disinfectant.

Water to lie in is not absolutely necessary if proper shade is provided but hogs in heavy flesh seem to enjoy it very much, so I always provide them with a water hole, but not a mudhole. This summer I expect to have a concrete bottom for their bath tub, but think they will miss the comfort of the soft mud.

G. A. MURPHY.

DIPPING SWINE.

The Live Stock and Dairy Journal— After trying most all kinds of remedies for lice, and also for worms, I have come to the conclusion that sheep dip is the best, used in solution of one gallon to fifty of water; then you are on the safe side, as some dip is a good deal stronger than others. It doesn't glue their hair to their skin as crude oil does. It leaves their skin in a nice, clean shape and their hair carries a good bloom. It is the best remedy for worms, as you can mix it in their feed. When I worm my hogs I don't give them their morning feed, but at noon I take a couple of gallons mixed in the proportion of one to fifty, and put it in their slop of middlings. If there are any worms the hogs are bound to pass them. It is the best and cheapest disinfectant. G. A. Murphy has used dip for years, and he has never had cholera on his farm. He has been breeding swine ever since he was able to carry the feed bucket.

So I guess that should be a proud thing to say.

If the farmers would dip and disinfect more and take as good care of their hogs as they would take of a fine brood mare they would have the same success as Mr. Murphy.

JOSEPH LEVY.
San Joaquin County, Cal.

MAKE THE CHANGE GRADUALLY

Care should be taken in turning calves out to pasture to see that the change to green feed is made gradually. A young calf may be in green feed a foot high and still be suffering for lack of nourishment, this being the case when they are turned out too abruptly. The digestive system of a calf that has been depending upon skim milk and grain has not developed sufficiently to handle the great bulk of green stuff that is necessary to furnish nourishment enough to maintain its strength and assure healthy growth.

Dutch Belted Cattle

In Dutch Belted Cattle I have the winning herd of America, having won all the important prizes at the National Dairy Show for the last five years. Young stock for sale.

My Hampshire Hogs have been selected with great care and my herd is one of the oldest in America. Herd headed by El Salvador, winner of two silver cups in the strongest competition of the middle west. Fifty young sows and boars for sale. This breed has won over all others in the dressed carcass contest for several years at the International Fat Stock Show.

If interested in the best Irrigated Valley in the U. S. write for circular.

FRANK REED SANDERS

Salt River Valley, Mesa, Arizona

Durocs! Durocs! Durocs!

I have a nice lot of both sexes for sale at present. Sold out on yearling Shropshire rams, but have some good ram lambs.

One black Percheron Stud Colt for sale. Inquiries cheerfully answered.

ENTERPRISE FARMS

H. P. EAKLE, JR., Proprietor,
Ranch Phone 3024; Res. 1801.
Woodland, Cal.

J. FRANK SMITH & SONS

Breeders of
REGISTERED DUROC JERSEY SWINE.

Young stock for sale, out of dams of choice breeding and sired by two great boars, Billie Rosebud, Jr., No. 89729, and Nebraska Sensation, No. 108661. These boars carry the blood of great winners and producing hogs.

All stock guaranteed to be as represented. Address:

Route No. 1, Box 42.

H. H. SMITH, Mgr.,

Hanford, Cal.

Hampshire Boars Guernsey Bull Calves

Six months and under. All well enough bred and good enough individually to commend them to the careful breeder. Five Hampshires shipped to Hawaii last week.

No cholera or tuberculosis guaranteed. If not as represented send them back.

Correspondence solicited from interested parties. Address:

J. W. HENDERSON, 503 First National Bank Building, Berkeley, Cal.,
or BELLA VISTA STOCK RANCH, R. F. D. 1, Box 2, Martinez, Cal.

For Your Hogs DIGESTER TANKAGE

Digester Tankage develops bone and muscle in young pigs and **MAKES THEM GROW**. It fortifies and strengthens the system against attacks of disease germs so that Tankage-fed swine seldom suffer from epidemics. It imparts such fit and finish to "show" swine and market hogs that it never fails to develop blue ribbon winners in the show ring and toppers in the market.

As a balancer in making up the ideal ration it is without a rival.

For full particulars and prices address:

THE WESTERN MEAT COMPANY
Animal Food Dept. San Francisco, Calif.

25---Bred Berkshire Sows---25 FOR SALE

We offer twenty-five high-class bred Gilts and Sows for Sale. Bred to farrow late in July, August and September.

They are large in size and of good quality. They are daughters and grand-daughters of Premier Longfellow, Masterpiece, Baron Duke 50th, Rivals Champion, Mayhews Premier and other good boars, and they are in service to a son of Premier Longfellow, two sons of Masterpiece and a good son of Berryton Duke, Jr.

We also have some young Boars and late Spring Pigs for sale. Prices on bred sows, from \$35 to \$60.

Come and get your pick, or write for description and prices.

GRAPE WILD FARM

A. B. HUMPHREY, Proprietor.

MAYHEWS, CAL.

Farm Located Eight Miles East of Sacramento on Folsom Road.

The Good California Kind

Medium-Type Poland Chinas

A number of young boars and sows for sale from seven to nine months old.

W. BERNSTEIN

HANFORD, CALIFORNIA

TAMWORTHS

KENNEDY BROTHERS.

THE AMERICAN BACON HOG. Registerable Pigs and a few October Boars from very large and prolific stock.

MERCED, CAL.

Poland Chinas

Both sexes, 4 to 6 months old. Four dandy Boars ready for service. Prices very reasonable. Satisfaction guaranteed.

C. L. THORNTON, R. 2, VISALIA, CAL.

ASK YOUR DEALER FOR

EL DORADO COCOANUT OIL CAKE MEAL

—for—

CHICKENS, MILK COWS, HOGS AND YOUNG PIGS.

Cheapest Food in the Market Today. If Your Dealer Doesn't Carry It

Address:

EL DORADO OIL WORKS,

149 California Street,

San Francisco.

Wool, Hides, Grain, Dried Fruit, Dressed and Live Poultry Wanted

For the best results and to get the most money out of your different kinds of Produce, ship the same to us. Highest market prices and immediate cash returns guaranteed. Send us samples before selling elsewhere. Liberal advances made. Mark and consign your shipments direct to

W. C. PRICE & CO.

Paid Up Capital, \$50,000.

Established 1876.

213, 215, 217 CLAY STREET

SAN FRANCISCO

Water Pipe

Hot asphaltum dipped, new threads and couplings; second-hand in name only. Prices far below your expectations. Screw Casing and Standard Pipe Fittings and Valves.

PACIFIC PIPE COMPANY

THE EXCLUSIVE PIPE HOUSE.

201 HOWARD STREET,

SAN FRANCISCO, CAL.

Write for Prices on What You Require.

THE VALUE OF A PURE-BRED SIRE.

The following table will show how rapidly improvement can be made by use of a pure bred sire. The first column shows the number of generations; the second, the percentage of pure blood in the sire; the third the percentage of pure blood in the dam; the fourth, the percentage of improved blood in the offspring; the fifth, the percentage of unimproved blood in the offspring:

Generations	Sire per cent pure blood	Dam per cent pure blood	Offspring	
			Per cent improved blood	Per cent unimproved blood
1	100	0	50	50
2	100	50	75	25
3	100	75	87.5	12.5
4	100	87.50	93.75	6.25
5	100	93.75	96.87	3.12
6	100	96.87	98.44	1.56

This table has equal application in the breeding of all classes of live stock.

INBREEDING OF CATTLE

AND HOGS.

The Live Stock and Dairy Journal—Will you tell me about how much inbreeding can be done with hogs and cattle? I have always heard that it is not a good thing. Horses do not do well, as I understand, when inbred and I do not see why hogs and cows should be exceptions. While hogs for market would not be as bad as for breeding purposes, still I would like to hear what you have to say on the subject.—H. M. B., Hanford, Cal.

Answer: Some of the best producing cows were obtained by inbreeding. While inbreeding is a short cut to establishing desirable characteristics of the dairy herd, yet it is also a quick way to intensify defects. It requires keen knowledge of animal functions and insight into the strength and weakness of animals to know whether it is safe to inbreed them or not. In the hands of a skillful man, inbreeding establishes desirable characteristics more rapidly than any other system of breeding. On the other hand, it will destroy a breed equally as fast if improperly done.

Practically the same rule applies in the breeding of swine. Unless the breeder has a line of breeding that is practically free from defects and of extra quality we would not advise inbreeding at all, and advise but little line breeding. When you try close breeding you must be very particular about selection of the individuals, as the weak points are more readily transmitted than the good qualities. About as close as we would care to breed would be a pair sired by the same boar and out of unrelated sows. The addition of a new blood in a herd gives more vigorous offspring. We believe a line bred boar used on sows of different blood lines is the best way to reproduce type and breed uniformly.

TUBERCULOSIS IN HOGS.

A. T. Peters, D. V. M., of Springfield, Ill., says regarding tuberculosis in hogs:

Hogs become infected mostly through the feed, seldom through the lungs. Hogs that are kept in dairies are more often found tuberculous. It is not uncommon to find whole herds of swine in dairy districts suffering from tuberculosis, so that the hog buyer uses great caution in buying hogs from those districts. Tuberculosis in swine is rapidly increasing. Young pigs are more liable to tuberculosis than older ones. It can safely be said that in nine cases out of ten infection is produced by ingestion. Pigs that are fed the refuse skim milk from the dairy or the viscera from the cattle that have died from tuberculosis very readily contract this disease.

During life the symptoms of tuberculosis in swine are much less marked than those in cattle. As a rule the general health of the animal is not much altered or impaired. In most cases tuberculosis of pigs is first noticed in the packing house. Sometimes there is a local disturbance, such as the swelling of the joints, especially of the shoulder and knee, which causes lameness and arching of the back, and a swelling of the lymphatic glands of the neck. These are all marked symptoms of tuberculosis. There may be a localization in the abdominal organs. This usually causes emaciation and unthriftiness. Tuberculosis may affect any organ or tissue of the body. Some of the marked symptoms, however, are a loss of flesh and a general unthriftiness. The animal has very little spirit, seems very drowsy all the time. Still the animal may eat well, but it seems that the nourishment does not assimilate properly, due to the disturbance in the organs of nutrition. Whenever the

glands of the neck and lungs become affected, then usually a hacking cough is noticed, with difficult breathing. In nearly all cases the lymphatic glands of the neck are very much enlarged. This can be very readily seen and felt. One must consider this as one of the important symptoms. Next the enlargement of the joints already mentioned and the peculiar gait of the animal. The animal grows weak rapidly. In the latter end of the disease they lie most of the time, when finally death occurs they are very thin. When tuberculosis develops in the bowels we usually find first the animal is severely constipated, later on changing to diarrhoea. During this time the animal becomes very much thinner and weaker and finally either is destroyed or dies. It is of importance that breeders should not breed a sow that is not doing well or shows symptoms of tuberculosis, for her little pigs will become infected very early, and it is safe to say that not one of them will live to be a mature animal.

On post-mortem examination one finds tubercular nodules in the lymphatic glands, especially those of the neck. Tuberculosis of the liver is found in about 50 per cent of the animals that die from this disease; the next organ is the spleen, being affected in about one-third of the cases; the lungs being affected in about one-tenth. It is interesting to notice that in most tuberculosis hogs the bones are affected. When the lungs are affected they very often adhere to the ribs and are pulled apart with great difficulty. The lungs do not collapse and feel gritty and rough as though they were filled with shot. Whenever tuberculosis is suspected in a herd it is well to open up an animal and hold an examination, and if the organs are found to be affected as described, then the carcass should be burned and not fed to the other hogs, so as to prevent further infection.

Where hogs are affected with tuberculosis they should be carefully examined. All animals that show in the least the symptoms described should, if they are in fair flesh, be sent to the packing house subject to inspection. If they are not fit for the packing house they should be slaughtered and then burned. The premises should be thoroughly disinfected with a good disinfecting solution. It is important that not any of the tuberculous animals remain on the premises, for if they do they will surely infect the other animals and the same process would have to be gone through with again. For this reason tuberculosis in swine is as dangerous as hog cholera, if not more so, for if proper disinfection and prevention are not instituted, this disease will stay on the premises for many years and will continually cause losses. The disease can be prevented but cannot be cured. We can not use the same method that we use in testing cattle for tuberculosis—that of subjecting them to the tuberculin test, for it is not adaptable to hogs. It has been tried, but not successfully, therefore the only remedy is the cleaning up of the entire herd and thorough disinfection of the whole premises. As to treatment, there is none. No cure has ever been found for tuberculosis in the human being, in cattle nor in hogs. Therefore one must rely entirely upon preventive measures.

Arthur H. Brinton of Woodland, who has heretofore confined his attention to horses, is arranging to breed Jersey cattle, Berkshire hogs, Wyandotte chickens and New Zealand bantams. Mr. Brinton is an enthusiastic advocate of purebred stock, and is securing the very best foundation stock available. We expect to hear some good reports from Mr. Brinton in the future.

THE PROBLEM OF CONTROLLING ANIMAL TUBERCULOSIS IN CALIFORNIA.

(Continued from page 4.)

live stock interests are adequately represented and on which commission there will be three members with proper technical knowledge and with sufficient sanitary experience with which to grasp both sides of the subject.

Recommendations to the Governor to appoint this Commission, should, if it meets with your approval, come from this Association, and in order that the Commission be represented by men who will fairly and fully represent the live stock industry, recommendations as to the personnel should be made to the Governor by the California Live Stock Breeders' Association.

In this paper I have especially refrained from discussing methods that might be adopted to control and eradicate animal tuberculosis solely from the fact that I would not care to be a party to any plan that might materially injure our live stock interests in order to secure the desired results, but on the contrary, I would like to see some plan adopted in which the live stock interests have their representation in the consummation of which the result will in the end justify its adoption.

L. H. Linbarger, who showed some splendid specimens of Poland Chinas at the recent fat stock show at Portland, gives the following feed as being productive of splendid results:

Alfalfa ground into a coarse meal and steamed, mixed with shorts or middlings.

Summer sun shades for swine will pay back their cost a good many times over in quicker growth and prevention of disease.



PRIZE-WINNING POLAND CHINA SOW.
Owned by Mr. M. Bassett, Hanford, Cal.

The brood sow should have cooling and laxative food before farrowing time and should be fed moderately for several days after the pigs come.

HORSES AND ENGINES.

Now and then we hear some one say that in a few years the draft horse will be almost entirely replaced by the auto truck and the gasoline tractor. Such a condition seems hardly probable, although there will be an ever-increasing number of such trucks and tractors used by progressive farmers and city business men. There is no doubt but that with the cutting up of large land holdings in

the West into smaller farms that the demand for desirable draft horses will be good for many years to come. The man who uses a traction engine on his farm must necessarily cultivate a large acreage in order to effect economy over horse power, and the smaller ranches are, for the time being, going to demand draft horses, while the larger ranches are going to use more and more traction engines. It is not a case where one industry is going to the bow-wows on account of another for, in the lifetime of this and the next generation, both the traction engine business and the draft horse business will go merrily on, each to a certain extent supplementing and stimulating the other.

AMERICAN PUREBRED STOCK IN BRAZIL

George E. Anderson, Consul-General U. S. A., Rio de Janeiro, Brazil, writes:

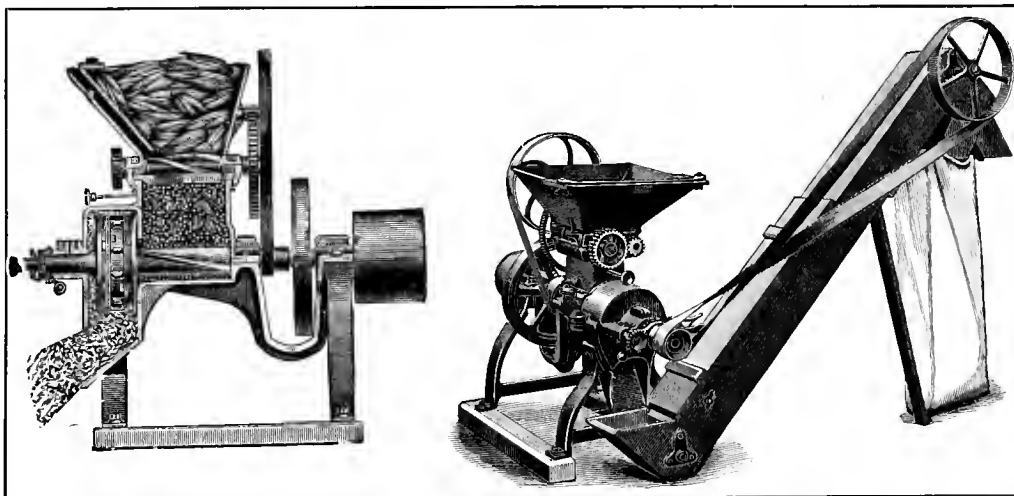
"It is possible that something can be done by American live stock breeders in the way of shipping fine live stock to Brazil, but the business will be limited in scope, at least at first, and it can only be attempted after correspondence and definite arrangements with responsible people. At several times in the past few years attempts have been made to build up a business of this sort and on one or two occasions stock has been shipped and sold at auction and the results very satisfactory to the importers, and it is very doubtful if this plan would succeed again. So far the attempt made to introduce North American cattle have not been successful.

"The case of swine is considerably different, and it is probable that something profitable can be built up in them. One of the prominent live stock men of the country made an importation of American Berkshires a short time ago and reports results as being very satisfactory. Hogs thrive in almost all parts of Brazil, and corn can be raised over a large portion of its tillable territory. American live stock men prepared to make propositions for the sale and shipment of live stock can probably do best by writing to Dr. Moura, Brazil, Rio de Janeiro; Senor Cincinnato Srago, Sae Paulo; or Dr. Assise, Brazil, Rio de Janeiro.

"There is certainly a disposition to look to high-grade stock when and where it is reasonably certain that such stock will be profitable."

"On the whole, a bushel of corn in the form of corn and cob meal gave 9.56 pounds of increase, and a bushel of corn in the form of corn meal gave 7.04 pounds of increase, a difference in favor of the corn and cob meal of 2.52 pounds of increase per bushel or 35.8 per cent.

Will Grind
**Dry Alfalfa
and Barley
Hay,
Corn Stalks
and Kaffir
Corn Stalks**



Will Grind
**Corn,
Corn and
Husks,
and All
Kinds of
Small Grain**

Can you go on in the old way, feeding from 20 to 30 per cent more whole grain than you would need to feed if you ground it, and expect the same results financially?

Can you afford to waste the large stem growth of your alfalfa and barley hay, and the stalks and cobs of corn and stalks of kaffir corn?

Can you neglect the opportunity to cheaply prepare a balanced feed for your horses, cattle, hogs and chickens, recommended by every United States Experimental Station, and expect to succeed?

Does It Pay You Now?

If it does not, write for a free illustrated booklet of grinding mills which are moderate in price, and which will do absolutely satisfactory grinding

Newell Mathews Company

Established 1886

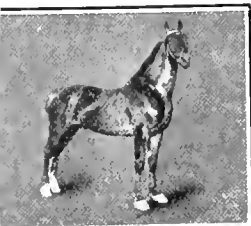
Los Angeles

::

California

::

Stockton



THE HORSE



The Art of Judging Horses Requires a System

The art of judging horses is much the same whether the purpose is the purchase of the animal or the rating in the show ring. To do this with any degree of skill requires a system of going over the animal. We believe that all the agricultural colleges use the score card system in teaching horse judging. It has the merit of system—it begins at one point and goes from one to another until all have been scrutinized, and while this gives assurance that nothing has been overlooked and is perhaps very good practice in learning fully what a horse should be, it is not practical after the eye has been trained to carry defects and to apply same in buying or compare same in judging in show ring.

We prefer in either case to begin at a certain point, approach the horse from the front and look him over—mouth, eyes and profile of head and body in general.

Without moving from this position we lower our eyes to his shoulders, breast and downward to his knees, cannons, pasterns and feet, being in a position to see if he stands squarely on his feet, which is very essential. Then passing around to the left side and standing a short distance from the animal—far enough away to take in the conformation of his neck and shoulders—we get a side view of his front leg and pastern, which should be lengthy enough and sloping enough to give elasticity in action. Next move up to the horse, standing at his shoulder, determining his height, which is one way of arriving at his size; get next to the individual in hand to determine a big one from one of medium size, since the makeup and fat on many a small frame have made him appear large when standing only a few steps away.

While standing at his shoulders slip the left hand down to his coronet and see whether he is smooth or has side bone, or any other blemishes that grow around the coronet.

Standing in this position we glance at his hocks. From this position any defect on the front or inside of same is readily detected.

Then step to one side and about opposite his hind leg to the left in a position to notice his back and coupling, his depth of rib and general outline as viewed from the side, and from this position determine whether his hind legs are straight or crooked.

Now stand squarely behind the horse. From this point see the width, conformation of hip and stifle, and the muscling of the hind quarters. Now ask the groom to lead him straight away at the walk, which should be straight, quick and elastic. Do the same at the trot. At each gait the ani-

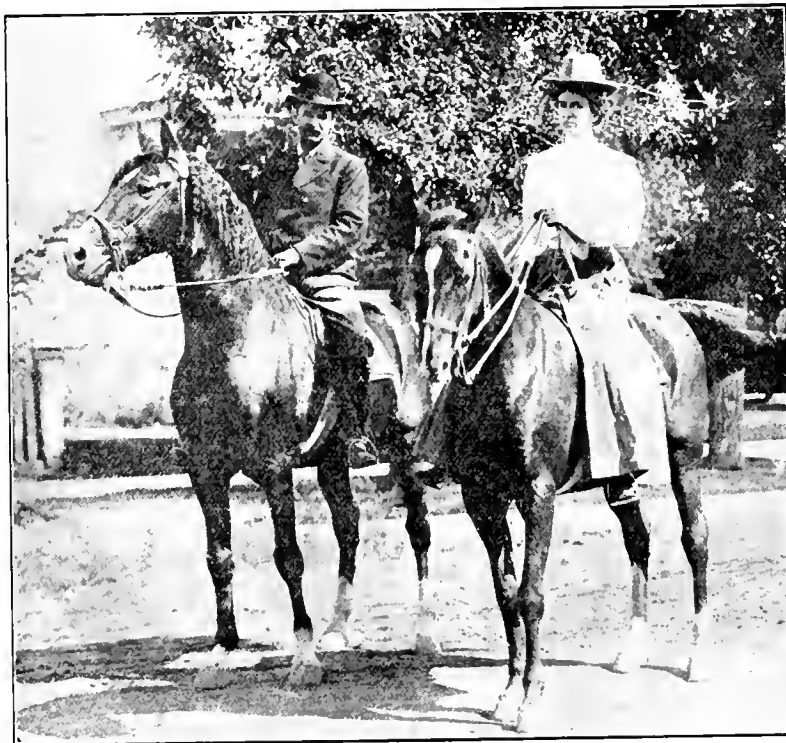
mal should be free from side winging in front or cow action behind, going straight over and feet all kept well under the body.

We may add from observation of twenty years that few farmers can tell you if asked if they patronized a side winger or not. So little attention is paid to this matter, no wonder so many horses "fall down" on action. The way of going adds or detracts greatly if a fine individual, and is being more closely observed in this day of rapid transit.

If purchasing, test the animal's wind. Give him a good, sharp run at the gallop, a man on his back or in harness, a

NOTABLE ARABIAN MARE AT BELLA VISTA.

There was received at Bella Vista Stock Ranch, Martinez, California, recently, for breeding purposes, the notable purebred Arabian mare Narkeesa, bred by Randolph Huntington and now the property of J. A. Lawrence, at one time associated with Mr. Huntington, and later manager of the Hartmann Stock Ranch. This mare is probably the tallest Arabian mare off the desert, standing 15½ hands. This height is in all probability due to the Huntington method of inbreeding. She is being bred to Zamel, the young three year old son of Hamrah, who in 1910 took first prize at the Durland Show in New York, in a large class of Arabian stallions including Halab.



Squirrel Montrose (on left), Mr. James T. Ragsdale in Saddle. Five-Gaited Saddle Stallion Who Has Delighted the Eye of Thousands of Lovers of the Beautiful in Horse Flesh.

full city block. Halter showing tests only the man and possibly the halter.

A high-class animal should have the best of feet and eyes, the pasterns should slope nicely into the hoof head completely where it joins the foot. It is always desirable to see the horse in harness, but never buy until stripped of everything but halter, and you have seen him walk and trot. Applying some such system of examining horses as indicated will insure competence in the art of judging, providing your ideals are correctly in mind.—R. R. Pittis, in the National Stockman and Farmer.

GOOD HORSE SEASON.

The season just closing has been a good one in the horse business, particularly in the movement of purebred stallions. There is now on the Pacific Coast many of the best stallions in the world, and the time is rapidly approaching when this class of stock will be so well distributed over the several states that there will be no excuse for the use of grade sires. The draft horse demand in the cities seems to have fallen off a little this season, but prices have been good owing to the fact that the supply hardly equalled the demand.

SPECIAL PRIZES OFFERED BY PERCHERON SOCIETY

The Live Stock and Dairy Journal—We have extended our regular classifications to the California State Fair, and the same have been accepted by the Directors.

Following are the special prizes offered:

Special A—Stallion, 3 years old or over, bred and owned by exhibitor, first prize, \$10 and gold medal; second prize, \$5 and silver medal; third prize reserve ribbon.

Special B—Stallion under 3, bred and owned by exhibitor, first prize, \$10 and gold medal; second prize, \$5 and silver medal; third prize, reserve ribbon.

Special C—Champion stallion, bred and owned by exhibitor. Open only to first and second prize winners in specials A and B. Champion, gold medal; reserve champion, silver medal.

Special D—Mare 3 years or over, bred and owned by exhibitor, first prize, \$10 and gold medal; second prize, \$5 and silver medal; third prize, reserve ribbon.

Special E—Mare under 3, bred and owned by exhibitor, first prize, \$10 and gold medal; second prize, \$5 and silver medal; third prize, reserve ribbon.

Special F—Champion mare, bred and owned by exhibitor. Open only to first and second prize winners in specials D and E. Champion, gold medal; reserve champion, reserve ribbon.

Special G—Get of stallion, four colts, either sex, get of same stallion, bred and owned by exhibitor, or shown with stallion, first prize, \$15 and gold medal; second prize, \$10 and silver medal; third prize, reserve ribbon.

Special H—Product of mare, two colts, either sex, American bred, produce of same mare, bred and owned by exhibitor, first prize, \$10 and gold medal; second prize, \$5 and silver medal; third prize, reserve ribbon.

Special I—Champion stud, consisting of stallion and four mares, mares only to be bred and owned by exhibitor, first prize, champion cup, value \$100 and \$20; second prize, silver medal and \$10 cash; third prize, reserve ribbon.

Special J—Five stallions, owned by exhibitor, first prize, champion cup, value \$100; second prize, silver medal; third prize, reserve ribbon.

Special K—Champion stallion, open class, champion, gold medal; reserve champion, silver medal.

Special L—Champion mare, open class, champion, gold medal; reserve champion, silver medal.

In champion classes (specials K and L) only first and second prize winners in the regular open classes can be shown.

Conditions—All animals competing for above prizes must be recorded in the Percheron Stud Book of America, and the owner must be a member of the Percheron Society of America. All animals competing must be regularly entered on the books of the Secretary of the Fair when he shows his stock, and the correct name and number of each animal given.

WAYNE DINSMORE,

Secretary Percheron Society of America.

INCREASING DEMAND FOR GOOD SADDLE HORSES

The Live Stock and Dairy Journal—The demand for good saddlers never was greater, and fine horses are scarcer than ever. The following article by W. E. Stillwell will interest many readers of *The Live Stock and Dairy Journal*:

"The saddle horse has forged to the front as America's greatest show horse. They can win more money and show in more rings than any other horse. They are at home in the five-gaited ring, walk, trot and canter combined, model, fine harness, heavy harness, roadsters, chargers, cavalry, jumpers and champion horse, any breed. These classes have been won by saddle horses in strong competition with other breeds. Saddle horse day in Kentucky at the fairs is the banner day. When the Bluegrass fair at Lexington, Ky., hung up \$1000 for the best saddle stallion, mare or gelding, it proved a great day.

"When you can sell a weanling filly for \$800 and win \$700 in premiums and get \$1000 worth of pleasure, that means \$2500 for a saddle filly 6 months old. When you sell a yearling for \$1500 it makes your bank account shine, and when you sell a 3-year-old for \$5000 it makes it sparkle. This has been done in the great Bluegrass nurseries, where the champions are bred. Garrot Brothers refused \$5000 for Black Squirrel when 18 years old; \$7000 was refused for Dandy Jim; Rex McDonald sold for \$5000; \$12,000 was refused for Bourbon King; Diana O' the Lea, the great grand-daughter of my horse, Pat Washington, sold as a 3-year-old for \$5000.

"Poetry of Motion is the greatest show horse living. He won four championships at New York, seven championships at Louisville, Ky., and was shown six years at all the big shows without a single defeat, and is still a show horse. Edna May comes next, winning \$14,000 in cash and \$6000 in silver. She sold for \$7000, which equals \$27,000. Kentucky Choice, \$3267 last year, and sold the last time for \$7450. John Smiley won \$1632 on Bourbon Prince and others last year."

J. T. RAGSDALE.
Merced County, Cal.

WATERING HORSES AT NIGHT

In an inspection of over one hundred and fifty of the leading livery and boarding stables in Boston and vicinity by representatives of the Work-Horse Parade Association, particular attention was paid to the matter of watering horses at night. In publishing the results of this investigation a bulletin states that all authorities agree, and experience teaches, that city horses should be watered between 8 p. m. and midnight; but it was found that less than half of the stables visited give their horses water after 7 p. m.

"A horse comes in hungry, and he wants his supper so much that he will drink but little, and he ought not to drink deeply at that time, even if he wanted to," was the way a stableman put it. "Then he eats a quantity of dry, heating food. He shouldn't have water right after eating; but if he doesn't get a good drink two or three hours later he will go through the night thirsty, and the heating food will burn out his insides for the lack of water that is needed to give the nourishment of the food a chance to do the good it ought to be doing."

Moreover, a horse not watered at night is very apt to drink too much in the morning.

This night watering is not only common humanity in hot weather, but it is almost equally valuable in winter.

For appetite comes with the bracing effect of cold weather, and horses eat more than they do in summer. Consequently, if this extra food is to do its part in giving the horse power to resist the cold and the strain of winter work, water must be given at the time when it will do the most good. Nothing does so much toward giving back a return for the food given in the way of extra strength, working endurance and good condition.

The effect of this night watering on the blood and general circulation is far reaching. The thirst that follows the digestion of a meal is the call of nature for the water that is needed to help the good of the food to get into the flesh and blood of the animal; and equally important is the part played by the water in sending the waste matter out of the body with the least possible wear and tear on the organs that perform this indispensable duty. A horse that remains thirsty all night cannot be expected to last so long as one that is watered at the proper time. A distinguished veterinary surgeon recently remarked:

"Going too long without water causes more colic in horses than anything else does."

SOME FINE PERCHERON COLTS

The Live Stock and Dairy Journal—I do not hesitate to state that I have in the stud the finest 2150-pound grade Percheron stallion in the State, as well as Inquiet, the imported 4-year-old Percheron of 1992 pounds. This latter horse has experienced severe hardships recently. Through his willing vim he received a bad backset, and for two or three weeks was a very sick horse. However, with careful nursing by his attendant, Jimmie Anderson, he is again at himself, and is proving a really sensible horse, with a bright prospect for the future as a sire. The first mare I had to colt by him was the 5-year-old mare Copulate, a registered Percheron, she being a full sister of the mare Copula, which won the championship gold medal at Sacramento last September, and which will produce to Inquiet a little later on. With the mare Copulate I experienced a little foolish misfortune, as I myself took care of her, leaving her comfortable with a nice little stallion colt and neglecting to detect that she would still produce another, which I later delivered, a mare colt, perfect and mature, but dead, through neglect of assistance.

I now have two other colts from grade mares. Color and symmetry are fine, and it is really marvelous the bone he produces from good mares. Hope to show you some, as well as a couple of yearling stallion colts, at the State Fair.

WILLIAM BOND.
Alameda County, Cal.

Mr. H. B. Thornberry has sold out the carload of excellent jacks which he had at the Stockton, California, Fair Grounds, and will have another importation at the same location about September 1st. The quality of the carload already sold was a revelation to many of the visitors who saw the fine individuals in the lot, and when Mr. Thornberry is at Stockton in September with two carloads of jacks and two carloads of jennys, we believe that he can be depended upon to have a string fully up to the high standard which he has set with his first importation. Those of our readers who will buy jacks or jennys this fall will do well to write Mr. Thornberry now, stating their wants, for with his experience he will be able to make excellent suggestions and selections for intending buyers.

WELL-BRED SADDLE STALLIONS

J. T. Ragsdale of Merced, Cal., reports that he has some fine young colts by Jack Rogers (No. 4576), sired by Gloster (No. 154), by Blue Jeans (No. 3); dam, Roxey Carder (No. 7626), by Rex Denmark, Jr., by Rex Denmark (No. 840). This stallion has Copperbottom cross through Randolph, Jr. He also has some youngsters by Colonel Rogers (No. 3287), by Monroe McDonald (No. 2291), by Rex McDonald (No. 833), by Rex Denmark (No. 840), by Criglers Denmark; dam, Nancy Lightfoot (No. 4696), by Monte (No. B667), by Montrose (No. 106), by Diamond Denmark (No. 68) dam, Hall Glencoe, by Black Squirrel (No. 58). There are no better bred stallions in the State than these two, and any one wanting to have a fine saddler should send some good mares to these fine stallions.

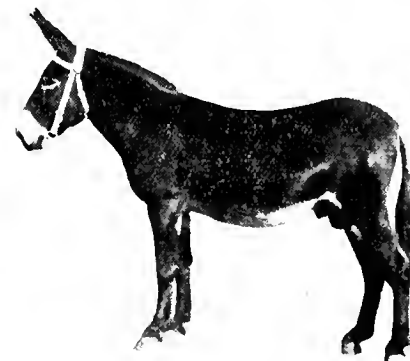
Dairy cows cannot be picked up as easily and as cheaply as formerly, but continue to become scarcer with the increasing demand. It behooves the farmer to keep every dairy heifer and breed it to a purebred bull.



45 big, heavy-boned dapple gray and black Percheron Stallions.
20 big, sorrel, brown and bay Belgian Stallions.
50 Mammoth Jacks.
My Stallions weigh from a ton to 2400 pounds.
I have the largest number to select from of any importer.
My first importation for 1912 arrived February 7th; my second importation February 16th.
I am making a special 30-day sale on fine, big, heavy-boned Mammoth Jacks. Parties wanting Jacks should not miss this opportunity.
Write me for special price list of Jacks and for Horse and Jack Catalogues.

W. L. DeCLOW,
Stallion and Jack Importing Farm,

Cedar Rapids, Iowa.



That Carload of

JACKS IS GONE

About September 1st I will be at the Fair Grounds, Stockton, Cal., with two carloads of Jacks and two carloads of Jennys. This will be unquestionably the best importation of Jacks and Jennys ever brought to the State.

Write me your wants now, and I will have an individual to suit you.

H. B. THORNBERRY,
Box 679, Stockton, Cal.

Lafayette Stock Farm

J. CROUCH & SONS., Props., - - LAFAYETTE, INDIANA.

Grand Summary of Prizes Won in 1911

Grand Special Prize Offered by the Societe Hippique Percheronne de France—For best group of five Imported Animals, either sex, any age, at International, Chicago, 1911, Bronze Statue, value 2500 francs, won by five of our imported 3-year-old stallions.



- 73 First Prize Ribbons.
- 56 Second Prize Ribbons.
- 28 Third Prize Ribbons.
- 18 Fourth Prize Ribbons.
- 16 Fifth Prize Ribbons.
- 2 Sixth Prize Ribbons.
- 2 Reserve Champion Ribbons.
- 23 Champion Ribbons.

A new importation of good, big-boned, heavy horses, including Percherons, Belgians and Shires, can be seen at our permanent stables at the State Fair Grounds, Sacramento, Cal.

J. F. CAMPBELL, Mgr.,
Phone Park 31. Sacramento, Cal.



SHEEP



Sheep Husbandry An Aid in Maintaining Fertility

We have cow testing associations for promoting interest in the breeding of dairy cows, and to aid in reducing the cost of production by weeding out the boarders.

We have race meets to stimulate the interest in and the breeding of light horses.

The breed associations of draft horses, hogs and beef cattle are quite active in keeping the public well informed along lines of interest and value to the public. But the sheep, the bearer of the "golden fleece," receives little publicity and favorable mention.

The present agitation concerning the wool tariff has reacted somewhat unfavorably on the wool market, which may produce a lasting effect on the fine-wooled breeds, but should produce but a slight ruffle among the mutton breeds. At least so long as the present high prices of beef and pork continue, mutton production should return a fair profit for the amount invested.

Farmers are beginning to realize more fully than ever before the need of a variety of stock in connection with grain farming in order to maintain the fertility of the soil. They are beginning to realize that what they need is a system that will improve the soil rather than deteriorate it. Land is becoming higher and higher in price, and farmers whose soil is depleted are seeking for a way to bring theirs up to the standard, while those whose fields are producing well want some means of keeping up their yields in order to pay interest on a large investment.

Legumes and grasses must be grown in a proper rotation of crops, and some class of stock that can make proper use of these should be kept. The fact that sheep can convert these feeds into edible material just as economically as the steer is sufficient reason why a small flock should be found on every farm. Their droppings furnish an abundance of rich fertilizer which they scatter over the soil in good condition.

In addition to this they will consume 576 out of about 600 known varieties of weeds growing in this country. When supplied with all the roughage necessary they require less grain than do cattle. So if we said nothing about the wool produced, sheep would still deserve a place on the average farm, since their gains are more economical than cattle because of the cheaper roughage consumed. Therefore, so long as the price of mutton is as high as that of beef, the sheep is returning as large a profit as the steer, and the wool is clear profit over and above that.

The average wool clip per sheep for California for 1910 was seven pounds, but this includes the fleeces from many fine-wooled flocks which probably shear much heavier than this average. This would indicate that more attention should be paid by men having black-faced ewes to the rams used on them. There are several

flocks of purebred mutton sheep and some grade Shropshire flocks in the State that are shearing an average of nine pounds. So it would seem possible to materially increase the average clip by the proper selection of rams of the mutton breeds. Of course, rams of the fine-wooled breeds would probably increase the weight of the fleece much faster than would be possible with the mutton rams, but the returns from the lambs marketed for mutton would probably be much less.

A small bunch of ewes properly handled will raise on the average about one and one-fourth lambs each.

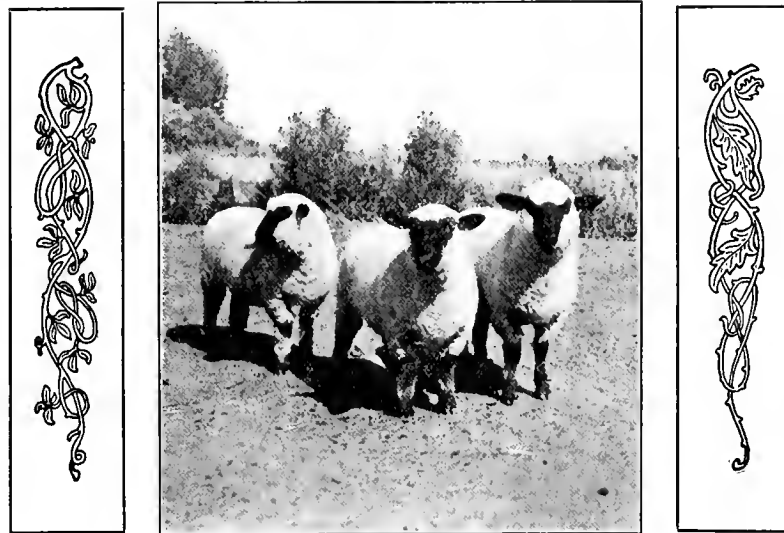
The mild climate here during the winter months makes expensive sheltering unnecessary, but ewes should have a dry pen in a shed at lambing time, and the ewes and lambs should be sheltered from the rains until about the first of April.

Pasture can be depended upon to

lets produced, the idea being that an abundance of green, succulent feed supplied at this time has a stimulating effect upon the generative organs.

The ram, or rams, should also be in thrifty condition at this time, and if they are not so active as desired, should be fed a grain ration twice per day of oats and bran and allowed very little hay. After the ewes are safely settled they may be turned back on the stubble or into any field where feed is available. If it is necessary to keep them in dry lots, they will do well on alfalfa hay alone. The thinner ones will need some oats and bran for a couple of months prior to lambing time.

Either the growing lambs or the breeding ewes will make good use of beets of any kind that are available, and are excellent scavengers to clean a field of beet tops and similar refuse. So it is entirely possible to carry a



HAMPSHIRE EWE LAMBS.

Bred and Raised by University of Nevada, Reno, Nev.

carry the ewes and lambs from the time the latter dropped, probably in February, until about June 1st. If it has not been pastured too close they will do well on it until the stubble fields are available. The lambs should then be weaned if they are four and one-half months old or older, and put on alfalfa or other good pasture if possible. If they are to be marketed as lambs, they will make good use of some grain at this time, preferably barley, oats and bran, about two parts of the former to one of each of the other two.

The ewes will clean up the stubble fields in fine shape and secure much more of the grain than hogs. They will also eat some of the stubble and many of the weeds. Those that are to be re-bred should have some green feed to get them in good, thrifty, sappy condition for breeding. This process known as "flushing" is an English custom, and is thought to increase the number of twins and trip-

flock through the entire year with very little grain, which is a factor worth considering when grain is as high as it is at the present time.

Add to this the advantages of having the weeds mowed, the fields nicely cleaned of all waste, which is converted into valuable fertilizer, the possibility of growing more roughages in the crop rotations and feeding them on the farm, a larger per cent of increase than is possible with cattle, and the small outlay necessary for a foundation flock, and we see why sheep husbandry is beginning to attract the attention of the far-sighted farmer on the smaller and medium sized ranches. J. I. THOMPSON.

SHROPSHIRE APPROPRIATIONS.

In the list of appropriations set aside by the American Shropshire Registry Association the state fairs of Washington and Oregon and the Interstate Fair at Spokane are recogniz-

THE USEFUL ANGORA GOAT.

The Angora goat is one of the most useful animals on the farm. This fact has been demonstrated by the success of those who have kept them. Browsers by nature and cheap to keep, the goats are useful tools to the farmer. Their habits admit of their being put to an economic use as brush destroyers, and they are capable of clearing the land of brushwood, sprouts and weeds with little or no aid from the ax.

Angora goats are always successful when properly cared for. They are different from all other animals—more intelligent than cattle, harder than sheep and handsomer and daintier than any other class of live stock, hence they are entitled to a treatment well suited to them. They need a clean place to eat and a dry place to sleep. If kept on dry ground they never will have foot rot. If they are left out in the rain and are compelled to sleep on the wet ground they will contract pneumonia. They some times are affected with worms, but if fed tobacco and salt there will be no danger from this source.

Well cared for goats will do good work and plenty of it. They need not be starved to induce them to browse, for they are browsers by nature. The right number of goats to the acre will depend, first upon whether the object is to kill the brush entirely or to use it as a permanent pasture; and, second, on the quantity of feed obtainable. There are not many patches of brushwood so dense, however, that four or five goats to the acre will not kill the sprouts in one season. By eating off the leaves, which are the lungs of the plant, goats will kill any plant they can reach. Most plants can be killed in one season, and the hardest in two. In places where there is no vegetation in winter for them to live on, goats must be fed. In addition to their browsing qualities they fertilize the ground very well. The best Angoras cost but little and return big dividends. Any farmer who has brush to destroy is losing money if he does not keep goats.

Angoras are also profitable on account of their Mohair. The average Angora will grow every year a fleece weighing at least two pounds. The price varies with the length of the fleece, its fineness and the amount of kemp that is present in the fleece of goats that are not of the highest breeding. Kemp is similar to the kemp in sheep fleece—long black fibers that are rather coarse. Long fleeces pay from \$2 to \$15 per pound, and are grown only on the best animals. Unless the fleece is sheared it will shed about once a year.

ed, but the California State Fair is not included. From the letter below it is readily apparent that the only reason California is overlooked is because nobody has gone after the Shropshire association. It is a matter that should not be overlooked another year.

WOOL INDUSTRY TO PROFIT BY NEW RATES

Under a decision of the Interstate Commerce Commission at Washington, D. C., in the wool case, the present rate of \$1 on wool from the Pacific Coast to Boston and other points on the Atlantic seaboard will be continued in effect notwithstanding this rate is materially higher than the rate from intermediate inland points, and the Commission specifically states this rate of \$1 is forced upon the railroads by actual water competition, and if the rate be advanced the railroads could not handle wool from coast to coast.

While sustaining the coast rate, the Commission finds that rates from interior points are excessive and orders reductions, but gives the railroads until May 1st to file new schedules which comply generally with the terms of its decision.

Under this decision maximum rates will be paid by points along the eastern border of Oregon, California and Washington, the rates diminishing east and west of that line, as necessitated by the distance on one side and water competition on the other.

Huntington, Ore., which is near the high line, will get a slight reduction from \$2.26 to \$2.01. Points west of Huntington will get a lower rate, grading downward as they approach the coast, where the \$1 rate will continue. The Commission finds that this is one instance where the long and short haul clause can properly be waived because of the fact that water competition exists and cannot be overlooked.

At the same time the Commission declines to make this water-compelled rate a basis of rates from interior points to the Atlantic seaboard. The decision will be favorable generally to the wool industry.

Radical changes in freight rates on wool, both in sacks and in bales transported from Western points of origin to Eastern destinations, were prescribed. The opinion was handed down by Chairman Prouty. It holds that the present rate of \$1.15 a hundred pounds of wool in sacks from Colorado common points to St. Louis should not exceed 80 cents, and that from points west of Cheyenne, Wyo., on the Union Pacific, and Trinidad, Col., on the Santa Fe, the rate to St. Louis might be 2 cents higher for each additional twenty-five miles.

On the Denver and Rio Grande a rate of 90 cents is authorized from the first station west of Pueblo, with a similar 2-cent increase from points further west.

DOCKING LAMBS.

George P. Williams says, on the subject of docking lambs:

A week old is a good time to do it if the lamb is strong; but we generally wait until the older lambs are about a month old, then dock everything down to three or four days old. Then in three weeks the last straggling

ewes will have dropped lambs, and the job may be finished the second time. Lambs docked after flies appear in the spring should be tarred well, and carefully watched till healed. Otherwise they are apt to become infested with magots. In case they do, use gasoline to kill the worms—no danger of using too much.

To take off the tail we use the docking pincers hot. This does away with all bleeding, and the lambs seem to stand the operation much better. To castrate, simply cut off half of the sack and draw out the testicles. If a clean knife and hands are used, nothing need be put on either wound. Many sheepmen only castrate the ram lambs the first day, then a few days later take off the tails. This is no doubt a good plan, but somewhat more work and unnecessary. We have generally taken off the tails the same day that the lambs were castrated. If all lambs can be "trimmed" at one week old, so much the better. We never lost but one lamb after trimming, and that was caused by internal bleeding, in a large ram lamb.

RAISING SHEEP ON HIGH-PRICED LAND

A writer in the Northwestern Stockman and Farmer says:

When the lambs are growing up it must be born in mind that bone and muscle forming foods should be supplied so that bone and muscle development will be certain. My experience is that to get the best results from a lamb crop it is necessary to begin before the lambs are born. By this I mean that the mother should be in good condition when the lamb is born, and everything should be done to secure a strong and protracted milk flow. Ewes are great milkers, far exceeding the capacity of the cow, size being considered. Remember and feed for milk production by using rich protein feeds such as clover, alfalfa and bran. When lambs are about a week old they begin to look around for something to eat. Be sure and give them a chance by making a lamb creep opening into a small pen where they can go at will and feed them there. A mixture of oats and bran makes a good feed for lambs. Feed all they will eat up clean. It is a good idea to always have a supply of bright, clean hay in the lamb creep.

One of the greatest drawbacks to sheep raising in some sections of the country is the parasites, particularly internal parasites, such as stomach, tape and other worms. If sheep are allowed to run on infected land bad results will always follow. The system that is used to combat this pest in many sections of the country, notably England, where sheep are raised on the same land year after year, is to resort to a system of temporary fences and hurdles. By this means we can move the sheep every few days to new pastures, and there is

little or no danger of their being affected by the parasites. Not only does this system free us from parasites, but it makes land that is in small patches and would otherwise go to waste, available for sheep.

There is still another consideration that raisers of mutton on high-priced land should not overlook. That is the quality of the stock they are raising. It is just as easy and far more economical to raise good, purebred stock than it is grade. Time and time again have the purebreds demonstrated their superiority over the grades in the feed lot, and in the breeding pen it is even more marked. If a farmer is going to raise sheep for nothing but mutton he can still afford to keep purebreds for the reason that they will grow faster and fatten quicker than will the grades. Then there comes the consideration of selling off the surplus rams and ewe lambs. At the present time there is a very good market throughout the West for purebred sheep of the different varieties, and the men who are in a position to supply them have abundant sale for their ram lambs for about an average of \$25 per head. That is far better money than any farmer can make on a bunch of grade sheep. Not only should the sheep be purebreds, but they should be good ones—individuals that will win in any competition. I believe that there is a great future for the purebred live stock business in Montana, and that the farmers who will get in early and establish a reputation for having good stock will sell all they can raise.

Sheep are truly called the plant scavengers of the farm, and save many a dollar that would otherwise have been wasted. Besides this they kill many weeds, in fact, there is hardly a weed that they will not, at some stage or other of its development, eat with relish. Sheep are the only animals that will get any of the grain that falls in the harvest fields when the grain is gathered, and thus they live for a while on what would otherwise be pure waste.

The Live Stock and Dairy Journal—Replying to your letter wish to say, that the appropriations for all special prizes to be awarded by this association are considered at a meeting of the Board of Directors held usually during the latter part of February or early March. Whatever applications are on file at that time are given consideration by the officers.

The executive meeting was held this year February 9th, and at that date we had nothing from California to present to the meeting.

Should the California breeders and State Fair Association officials desire recognition by this Association next year, we suggest that your application be in the office of the Secretary in January of 1913.

Very truly yours,

J. N. WADE,
Secretary-Treasurer.
Lafayette, Indiana.

SHEEP IN AUSTRALIA.

The total number of sheep in Australia, including Tasmania, was estimated for 1910 at approximately 100,000,000. Of this number approximately one-half are in the state of New South Wales.

In Australia sheep are handled in large flocks under the paddock or fencing system, which reduces the labor costs to a minimum. From the wool grower's point of view Australian land laws are almost perfect. Large areas of grazing land may be leased at very low prices with long periods of occupancy, thus insuring permanence and stability to the business.

The climatic, forage and other conditions surrounding the raising of sheep in Australia are excellent, the carrying capacity of the ranges high, and while there are no long, cold winters, periodical droughts occasionally cause heavy losses. These losses, however, will probably never again be so severe as in the past, because of improved railroad facilities. The Australian wool is clean, of a low shrinkage and particular attention is given to the demands of the trade regarding classification, handling and shipment of the fleeces.

The Australian sheep are a type peculiar to the country, combining in one animal many of the best characteristics of the mutton and Merino types of sheep.

Of the total number of sheep in Australia, probably 80 per cent are Merinos, and of the wool shipped out of that country 75 per cent is classed as Merino. The majority of Merino sheep are grazed in the drier, more arid regions, where that type naturally thrives best and conditions compare somewhat with the ranges in Western America. The mutton breeds in Australia are found in the more fertile portions along the coast where convenient access is had to the large freezing works, and the growers find an excellent market for fat stock.

Labor, while paid almost as much as in the United States, does not cost so much in the aggregate because of the paddock system, which enables one man to care for very large numbers of sheep.—Report of Tariff Board.

CHAS. A. KIMBLE

Breeder and Importer of

RAMBOUILLET AND AMERICAN MERINO SHEEP

Correspondence Solicited
Orders Promptly Filled

Phone Sub. 5004 SANFORD, CAL.

Frank A. Mecham

Breeder and Importer of

Shropshire, Rambouillet

AND

American Merino Sheep

RED POLLED BULLS FOR SALE

Take electric car at Petaluma or Santa Rosa for Live Oak Station.

Address,

FRANK A. MECHAM,
Petaluma, Sonoma Co.,
California
Phone Rural 166

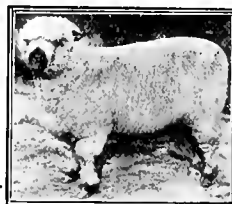
San Ramon Shropshire Flock

PUREBRED AND GRADE RAMS ALSO EWES, FOR SALE. INDIVIDUALS OR CARLOAD LOTS.

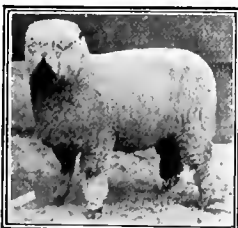
Flock headed by the following prize winning rams:
COOPER (3680)—First at Royal Show, England.
WARDWELL HONEST—First ram, American class, International Chicago, 1907.
P. ROBERT (105)—First yearling lamb International Chicago, 1910.
ALTAMONT (4008)—First ram lamb New York, Connecticut and Virginia and White River Junction State Fairs, First International Chicago, 1910.

PRIZES WON BY FLOCK, 1911.

California State Fair—Thirteen out of fifteen first prizes and four championships.
Omaha—First and second ram lambs; first and third ewe lambs.
Our grade rams are raised on the open range.



First Prize Ram Lamb at Omaha



First Prize Ewe Lamb at Omaha

BISHOP BROS.

SAN RAMON, CALIFORNIA

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

VETERINARY

We cordially invite the readers of the "Live Stock and Dairy Journal" to consult this department. Questions will be answered free by mail and a stamp should be enclosed for return postage. Give age, color and sex of animals together with symptoms and previous treatment, if any.

In regard to the lump on my cow's jaw, about which I asked you in the April Journal, it is on her head, not on her jaw, about half way between her left eye and the corner of her mouth. The lump is about as big as a turkey egg, hard, immovable, and does not seem to pain her at all. Once it broke open and discharged slightly.

I also have a horse that was foundered eight months ago. She is lame yet and her feet are about half ground out. What can I do for her and how long will she be crippled?—D. A. W., Ontario, Cal.

Ans.: In the case of the lump on the head of your cow, the cavities in the head at the point you indicate sometimes become filled with pus or other fluid causing a bulging of the bones of the face. Opening up and getting drainage eliminates this condition. Also, the teeth extend to about the point you indicate. A tumor is sometimes formed on the end of a tooth causing a bulging of the face. Extraction of the tooth eliminates the condition. Either of the conditions described may break, cause a running and then heal again.

For your foundered horse, get some muslin and some pine tar. Tear the muslin into strips five yards long and three inches wide. Place tar on bandage and wrap around horse's foot applying more tar as you wind the bandage. Allow bandage to remain on as long as it will, and then repeat treatment. Be sure that the feet are thoroughly clean before applying bandage. Possibly in two months' time the horse will have a foot to which you can apply a shoe. If so have shod immediately and keep shod. A concave shoe is to be preferred, that is one disced from outside in, so as to relieve all pressure on sole of foot.

I have a young mule that went lame. It appears to be a sprain of the ankle. What would you advise doing?

Answer: Shower with cold water and bandage. Repeat daily. If not greatly swollen get plaster paris bandages and apply them according to directions on box. Let same stay on for three or four weeks. Remove carefully.

Will you kindly inform me on closing a small hole in a cow's teat. It was cut on a barbed wire; is about half way up on the teat, and about the size of a pinhead. Milk runs out all the time. How long would it take to heal it?

Answer: Place a milk tube in teat and paint outside with iodine. If this does not prove effectual, leave tube in and scrape the edges of cut until they are raw. It may take several weeks before it will heal.

OUR NEW DRESS.

What do you think of the purification of the cover of the Journal? We didn't make the change because of any charges that we were publishing a yellow journal, but we came to a point where we became convinced that our readers would be glad to trade the yellow cover for four extra pages of reading matter. That makes eight pages we have added in two months, and while eight pages a month means a big additional expense to us, we feel fully justified in shouldering it in view of the widespread encouragement and patronage we are receiving from old and new friends alike.

LETTERS.

During the past months, so many letters have come to us commending the Journal, that it is difficult to select the few which space permits us to publish.

However, I have selected a few, referring both to advertising results and as to the readable qualities of the Journal. The two are so closely related, however, that if the Journal proves its efficiency as a readable paper, it must also be an efficient advertising medium. Editor McFarland is being bombarded with Purebred Sire League mail and this movement instituted by the Journal, will be made the greatest uplift the purebred stock industry has ever had in our field. It means more breeders, more sales, more money and better stock. The Journal is going to keep about two jumps ahead of developments within the scope of its activities, and we are sincerely grateful for the hearty co-operation of an ever increasing number of our readers.

Letters like these spur us on to greater effort toward bettering the Journal:

"The Journal has been of great interest to me, and has given me a distinct impression of your State."

[Extract from a letter from an Iowa dairyman who is investigating the merits of California lands, with the intention of settling here.]

"I have received several inquiries about saddle horses through The Live Stock and Dairy Journal, and am well pleased with my advertising. It is money well spent. I have sold several saddlers at good prices."—James T. Ragsdale, Merced, Cal.

[Breeder of gaited saddle horses.]

"Enclosed you will find check for ad. Horse is sold. Your ad. surely did the work in short time—only one week after publication. Please take ad out. Too many inquiries."—A. H. Blakely, Ontario, San Bernardino Co., Cal.

[This refers to the stallion Carlin advertised in the April Journal.]

"I think your paper is the best live stock paper in the West."—F. R. Williams, Monrovia, Los Angeles Co., Cal.

[Breeder of Duroc Jersey swine.]

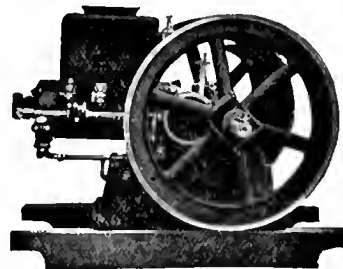
"I want to tell you what I think of your paper as a farmer's paper. Some few months ago I ordered the paper through one of your field agents, and feared that I had made a mistake. I have received several copies, and want to say that I am more than satisfied with it, and hope that it will continue to improve."—F. M. Barney, Hanford, Cal.

"Our opinion is that The Live Stock and Dairy Journal is paying us well for the investment. It seems that EVERYBODY MUST TAKE IT, as they all say, 'Saw your ad. in the Journal.'"—Four Oaks Stock Company, Woodland, Cal.

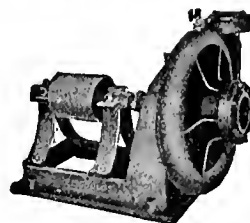
"If every one who advertises with you gets as good results as I have, your paper should certainly be greatly appreciated. I have paid you something in the neighborhood of \$50 for advertising and can trace directly to those ads. sales aggregating \$8,880, and partially due to same ads. sales amounting to upwards of \$3,000. Thought it might be of interest to you to know this, for a man usually likes to hear that his efforts, or rather his life work, is appreciated once in a while, anyway."—H. B. Thornberry, Box 679, Stockton, Cal., or Box 1117, Los Angeles, Cal.

[Mr. Thornberry writes this letter to the Business Manager of the Journal after selling a carload of Missouri jacks.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.



Freeport Gasoline Engine



Gould's Centrifugal Pump



Gould's Pyramid Pump

FREEPORT Gasoline Engines

Cheapest and Best Engine Manufactured
Guaranteed to Develop the Power
Simple and Fool-Proof
Each Engine Guaranteed
Send for Special Catalog and Prices

WOODIN & LITTLE
PUMP HOUSE

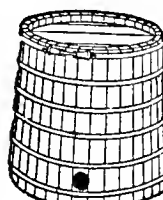
33-41 Fremont St., San Francisco

Pumps for Every Service & Use

Irrigating, Steam,
Hand, Windmill and Power
PUMPS

Windmills and Tanks
Pipe and Pipe Fittings

CATALOG OF USEFUL INFORMATION MAILED FREE



Wine Tank

TANKS TANKS

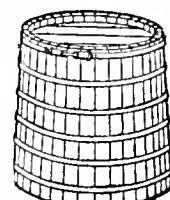
WINDELER'S PLANING MILL AND COOPERAGE

Geo. Windeler, Prop.

Water Tanks, Wine Tanks made from carefully selected stock by careful and experienced workmen. "Tanks that are well made last a long time." It will pay you to get my prices before buying.

GEO. WINDELER,

144-154 Berry Street, San Francisco, Cal.



Water Tank

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Live Stock Auctioneer

Proprietor of

LINDEN STOCK FARM

Horses, Mules, Jacks, and Shropshire Sheep For Sale

Office, 704 Market Street

San Francisco, Cal.

RHOADES & RHOADES

Expert Live Stock Auctioneers

HORSES, HOGS, COWS—Sales conducted in all parts of California and adjoining states
Write for dates and terms

OFFICE, 830-832 MAIN STREET, LOS ANGELES, CAL.

BREEDERS, ATTENTION

The demand for pure-bred cattle, horses, sheep, swine and poultry was never greater in California than at the present time, and this demand is constantly increasing, owing to the great number of new farmers locating in our State. Do not sacrifice your surplus pure-bred stock just because there is nobody in your own neighborhood anxious to buy it. Place an advertisement in **THE LIVESTOCK AND DAIRY JOURNAL** and let our readers know what you have. Somebody somewhere wants just what you want to get rid of.

Advertise, and ask all that your stock is worth.

CLASSIFIED INFORMATION

J. F. JOHNSTON, 114 N. Irwin St., Hanford, Cal.—Dealer in Cigars and Tobaccoes and Smokers' Articles. Headquarters for stockmen, dairymen and horsemen. Visiting stockmen and homeseekers about to locate in Kings County always welcome.

HANDLING THE BULL FOR PROPER DEVELOPMENT

(By W. H. Underwood.)

When the raising of good stock is to be taken into consideration the bull is the better half of the herd. In a majority of cases this animal seems to possess and is disposed to exercise a head of his own and, consequently, needs careful management and control from the beginning of his calfhood.

I am not sure but that even beyond this period thought should be given to his ancestry in order to possess a knowledge of the traits of character and disposition likely to be developed in the calf. A vicious ancestry either on the part of the sire or dam will likely sooner or later manifest itself in the young animal; and in selecting the one to head the herd this should be carefully guarded against.

One requirement in handling the bull is with reference to his early, thrifty growth and proper development. Good feed and good care are essential in order that a decent, well-proportioned animal may head the herd, and one that will likely leave a good impress on his posterity.

The calf should be dealt with from the start gently, yet firmly, but never in a teasing or bantering way. He should be taught to be handled quietly, to be easily haltered and led by the time he is a yearling, and a good ring should be put in his nose to aid in his complete control.

When old enough for service he should not be allowed to run with the other cattle, but be kept stabled, or in a substantially fenced field or lot. The latter is the best and can be provided in a reasonably cheap and effective manner. My own method is to have a lot, consisting of about three acres, enclosed with a four-foot wire fence substantially put up on good, well-set posts, the posts extending eight or ten inches above the top wire of the woven fence, which is put on the outside of the posts. On the inside of the posts a barbed wire is placed about six inches above the top of the woven wire fence and one also about eight inches below the same. In nearly every case this will be a sufficient safeguard against fence throwing or breaking out.

The lot is well provided with water and comfortable shelter, and a strong plank-fencing gate, protected with barbed wire on the inside, which completes the arrangement. I find in my own case this kind of enclosure sufficient to keep under control a vicious bull of about 1700 pounds weight.

The old reliable commission house of W. C. Price & Co., San Francisco, are getting top notch prices for wool and hides, and are paying spot cash with liberal advances. This house has built up an enviable reputation for square dealing during the thirty-six years it has been doing business in San Francisco, and those of our readers who have never dealt with them would do well to get in touch with them. Their advertisement appears in this issue.

McElroy & Barclay of Elko, Nev., are offering some snaps in Nevada lands, in their advertisements in this issue. They have a big list of all kinds of property and will gladly mail same to anyone interested.

A BUSINESS BUILT ON INTEGRITY

The business of breeding and selling pedigreed live stock is one that necessitates honesty and fair dealing. Higher motives than mere financial success must dominate the work of those to whom is entrusted the responsibility of developing and improving the breeds. The man who so far ignores the dictates of his conscience as to misrepresent the breeding of an animal does an injustice to the breed and to those with whom he deals. His crime may be likened to that of the man who robs the soil, or to that of an enterprise which wastes the natural resources of the country, because the damage done cannot be easily repaired and coming generations must suffer the consequences.

The breeder should accept his calling as a trust to be kept inviolate and under no consideration should ownership of the best animals of a breed carry with it the right to put these animals to uses which will narrow or destroy their powers of advancing the breed.

There are some rather common practices which, while not dishonest, are almost equally contemptible. The practice of castrating successful stallions to satisfy the hobby of some rich owner of a show stable may be cited as an example. Instance after instance where this has been done with irreparable loss to the horse breeding interests of the country might be mentioned.

Pedigree record and fair associations find it an impossibility to prevent fraud. They have erected every safeguard in the way of rules and regulations of which the mind of man can conceive, and while they have mitigated dishonest practices they find it impossible to insure prevention. As in all dealings in all lines of business, the matter of honesty rests with the individual. No amount of official papers, official seals, marks of identification, ear tags, hoof numbers, photographs, descriptions of the individual, compulsory registrations, compulsory reports of births, deaths and transfers, inspection at the port of entry, foreign certificates, or other red tape and obstacles will ever entirely prevent fraudulent practices so long as there are dishonest men in the business. Most purchasers of live stock realize this and may refuse to buy animals from any one of whose honesty they are not well assured.

The writer does not lack appreciation for the efforts that have been made by record associations and others to prevent fraud nor does he think these efforts have been in vain. The more obstacles placed in front of those with fraudulent inclinations the better, for in this way the bunglers and the careless will be caught. There is a type of man, however, that combines great shrewdness with dishonesty and who is not so easily stopped. If caught he wriggles out and thenceforth, instead of reforming, he only exhibits greater shrewdness in his crooked work. If driven from one breed he soon takes up another.

No better justification can be offered for the study of the history of breeds as conducted at our agricultural colleges than that such study impresses upon the student's mind the fact that the master breeders of the past were dominated primarily by a love for the work and an earnest de-

sire to improve their animals. In many instances the financial success of their efforts seems to have been of secondary importance to them, and in some cases it seems to have been entirely ignored. They worked because of inspiration and were carried along by the joy of creating something new and better.

Does any one ever stop to speculate whether Thomas Bates, Amos Cruickshank or William McCombie ever substituted one animal for another or one pedigree for another? Does any one wonder if T. L. Miller ever sold grades as pure-breds? Certainly not. They were led by high ideals and noble motives. Truly great breeders have always been men whom it was a pleasure to know, and personal acquaintance with them did not serve to detract from the measure of appreciation called forth by the success of their work. The breeding of live stock has seemed to ennoble the men who engage in it and today they will, as a class, be found the most respected men in their communities, judged as men.

It is singularly unfortunate that a business which reacts to the benefit of character should at the same time offer lucrative opportunities for dishonest practices. The ease with which paste may be sold as diamonds in the live stock world has proved an irresistible temptation to some, and has at times threatened to diminish or destroy the invaluable accumulations of many years of patient labor.

A highly sensitized public conscience, a higher regard for the trust which rests with us as breeders, greater vigilance in all dealings and quicker and more severe punishment when fraud is discovered—these are most important in order that the work of bettering the live stock of the world may not be handicapped by a weakening at the very fountain head of this improvement—the breeds. The writer's attitude is not pessimistic, but those who are in a position to know will agree that there is just cause for the sounding of a warning. If the crookedness that has occurred in the breeding, registration, sale and exhibition of live stock during the last ten years could be collected and displayed in one lump it would pretty well shatter faith in human nature. Many who are well aware of this situation object to anything being said of it publicly, but publicity is the best possible remedy.—Henry Vaughn of Ohio State University.

THE MILK GOAT INDUSTRY.

At the recent annual meeting of the American Milk Goat Record Association at Chicago, Winthrop Howland of Redlands, Cal., was elected a Director. At this meeting the report of the Secretary showed that it had been impossible to secure permits from the Government to import milk goats from Europe, owing to the prevalence of foot and mouth disease. The report stated also:

"There were ninety-four new registrations of milk goats. Twelve new members were added to the roster. The industry with all the handicaps is flourishing nicely. A growing demand for purebred milk goats is something wonderful, at prices ranging from \$50 to \$100 each. All members are requested to keep their stock pure by using purebred bucks. Grade does can be improved by only using purebred bucks."

Mount Tamalpais Military Academy

SAN RAFAEL, CALIFORNIA.

Efficient teaching staff. Accredited by Universities. Junior School separate. Only Western school having Cavalry and Mounted Artillery. Open-Air Gymnasium. Open-Air Swimming Pool. United States Army Officer detailed by the Secretary of War. Half of year begins January 4, 1911.

ARTHUR CROSBY, A.M., D.D.,
Headmaster.

A NOVEL INVENTION.

Virgil Connell, a sheepman of Antelope Valley, Nevada, has invented a novel device for protecting his lambs from coyotes, and after several extensive trials the apparatus has proved very successful. It consists of an electric device that sets off an explosion every hour, and rids the locality of coyotes. The timing of the explosions was set at one hour intervals after a close study of the traits of the animals. The explosion causes a hasty retreat, and before the coyote can decide on another attack he is again scared off.

Stockton-Lodi Sacramento

8 Trains Daily Each Way

Baggage Carried



Central
California
Traction
Co.

SOUTHBOUND.

No.	Leave Sacram'to	Arrive Lodi	Arrive Sto'k't'n
7	7:10a	8:42a	9:00a
13	9:10a	10:45a	11:05a
17	10:15a	11:45a	12:05p
23	12:15p	1:45p	2:03p
29	2:15p	3:45p	4:00p
35	4:15p	5:45p	6:05p
41	6:00p	7:42p	7:52p
47	10:10p	11:40p	12:01a

NORTHBOUND.

No.	Leave Stockton	Leave Lodi	Arrive Sac'to
6	6:45a	7:00a	8:30a
10	7:45a	8:00a	9:35a
16	10:00a	10:10a	11:45a
22	12:05p	12:15p	1:50p
28	1:45p	2:00p	3:35p
32	4:00p	4:10p	5:45p
40	5:45p	6:00p	7:35p
46	8:00p	8:15p	9:42p

STOCKTON-LODI SERVICE.

Leave Stockton.

A. M.—5:15, 6:00, 7:00, 8:00, 9:00, 10:05, 11:00.

P. M.—12:10, 1:05, 2:00, 3:00, 4:05, 5:00, 6:00, 7:00, 9:10, 11:05.

*Daily except Sunday.

Trains Leave Lodi.

A. M.—6:05, 7:00, 8:00, 9:00, 10:10, 11:00.

P. M.—12:15, 1:00, 2:00, 3:00, 4:10, 5:00, 6:00, 7:00, 8:15, 10:00, 11:55.

*Daily except Sunday.

TICKET OFFICES:

1024 Eighth Street Sacramento
3407 Magnolia Avenue Oak Park
Graham's Drug Store Lodi
Hotel Stockton Stockton

Connections made at Sacramento with Northern Electric trains to and from Marysville, Oroville, Chico and way stations, and at Herald with Amador branch trains.

At Stockton with Santa Fe for San Joaquin Valley points.

L. H. RODEBAUGH,
Traffic Manager, Stockton.

POULTRY DEPARTMENT

THE VALUE OF MILK AS A POULTRY RATION

J. C. Clipp of Sattilo, Ind., says: "It is remarkably strange that so few poultrymen realize the value of milk for fowls, especially sour milk. The majority of farmers pour all the milk into the swine troughs, never retaining a drop for the fowls. We admit milk great for porkers, but you can get greater results by feeding it to a flock of healthy fowls.

"Some poultrymen, or rather farm poultrymen, give it to the fowls as a drink, but that is the wrong way. Milk should be given to fowls from a food point of view. When milk is fed from that viewpoint much better results are sure to follow. I have known of several farmers giving milk to fowls as a drink, never supplying water for weeks, but that is the wrong way. Fowls will not drink quite so much water when milk has been fed freely, but they should have fresh, clean drinking water at all times.

"Three years ago we had charge of the exhibit of a friend's birds at one of the leading poultry shows. The birds were R. I. Reds, single combs, and when the judge came to the coops where this exhibit was the writer happened to be present. When the judge looked over the birds in these coops, noting the large, massive frames and bones with brilliant red plumage he said:

"What enormous bones and frames! They look like turkeys. I wonder what they have been fed on."

"I said: 'On milk from the time they were hatched until the day they were shipped to this show.'

"The judge said:

"That is convincing enough of the value of milk for fowls."

"These fowls created considerable attraction by all the visitors. I suppose that if I heard one lady say once, 'Oh, what fine birds!' I heard the remark one hundred times. They were above the average and easily won every possible first premium.

"For several seasons we have fed our chicks freely on milk. We keep quite a number of Jersey cows and I find that we have not lost anything with our poultry in keeping plenty of good heavy milkers. I am of the opinion that almost any variety of fowls can be grown to almost one-third increase in their natural weight by growing them on a liberal use of milk and ensilage.

"You can not get up a better ration for laying hens than ensilage, buttermilk and dry wheat bran. If your hens are fed freely on this ration they will have to lay. If they do not lay with a ration of this kind they are worthless and should be disposed of at once. I have noticed several tests made with skim milk fed to chicks, and in every instance the chicks made an increased gain over those fed without the milk.

"In our own experience we could always get much larger fowls by feeding milk. Last spring we hatched several chicks in March, and every chick was fed freely on milk, as our fowls are always retained for breeders. Our cockerels on December 1, 1911, weighed from eight to nine and one-half pounds, the majority weighing around nine pounds, although the standard only calls for eight pounds.

"If you can have plenty of milk for

your fowls along with necessary grains you can easily develop ideal show specimens if you have anything like strong blood lines behind your strain, and as for increasing the egg yield, I firmly believe you can double the yield by feeding liberally on milk. Feed milk, and charcoal with a very little salt sprinkled over it, with sharp grit, and I will venture the assertion your fowls will lay eggs in surprisingly large numbers unless they should be old and utterly worthless."

THE HOUDAN.

The Houdan is of French origin, and is bred to a large extent in France and Germany and many other sections of Europe. They were first introduced into America about forty years ago, and became quite popular in a brief time. During the sojourn of this breed in this country it has become in a way Americanized, and has lost much of its ancestral identity.

The old cuts of the Houdan that the writer has seen were truly hideous, and some of the later day drawings and stock cuts are a disgrace to the breed, whose beauty is one of its greatest attractions.

The modern Houdan, when properly bred, may briefly be described as follows:

A squarely built fowl of the Dorking type, a fairly long body, with broad back, shoulders and saddle, with a slight sloping of these sections toward the tail, which should be car-

Some sections occasionally show an almost correct marking, and may be passed as practically perfect. The white marking should be evenly distributed. Large patches of white are objectionable, and the white should be clear and distinct, with no mixture of the black and white. Black should be predominant in wings and tail, although clear white-edged feathers of primaries in wings and main tail feathers is not objectionable.

In regard to color our selection of breeding stock is in favor of the darker specimens, as there is a tendency of the breed to get lighter at each moult, although some specimens show predominating black at an advanced age. If 2-year-old hens of Standard color are mated to a very dark cockerel the result will be good marked birds of both sexes. We would not advise the selection of extremely dark birds of both sexes for mating.

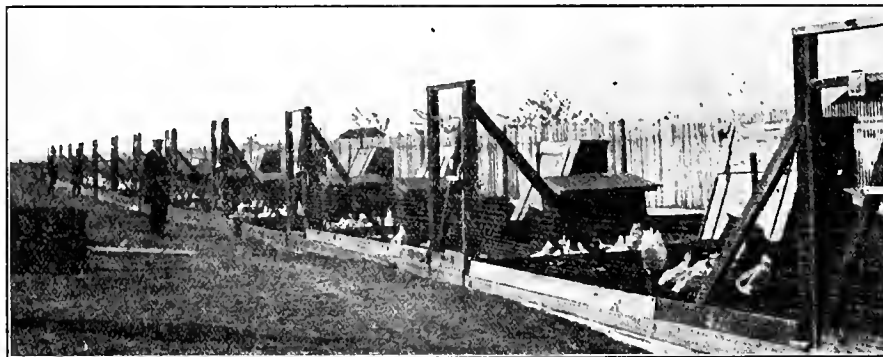
Formerly a leaf or antler-shaped comb was called for, but the present Standard calls for a small V-shaped comb. With me the Houdan proved to be non-setters and prolific layers of large, white eggs. As table fowls they are among the best; being of a quiet nature they fatten readily and have plump bodies. Mature cocks should weigh seven pounds, hens six pounds.

In California they are very popular with those who breed them, being excellent producers of the large, white-shelled egg so much desired. The one objection of their crest being soaked during the rainy season, causing the

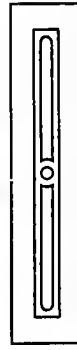
For the beginner of moderate means the best plan is to buy eggs and set them under hens. Almost any poultryman or farmer can supply you with two or three broody hens at a reasonable price. These hens may be of any breed or several breeds—an earnest determination to set being all that is required of them. In this way your young stock is more uniform in size. If you attempt to raise chickens from the eggs of one or two hens, the number of flocks, crops and yards and—in consequence the amount of work—is greatly increased. Be sure to dust your hens with insect powder while they are setting, and give them an especially thorough application just before placing them in the coop with the newly hatched chickens.

After becoming familiar with "nature's system" of poultry production, you are ready to take up artificial methods. Your first investment should be an incubator of moderate size, but first-class quality. Don't be induced to buy a cheap incubator. Remember that every season you will entrust several dollars' worth of eggs to this "wooden hen" and a few poor hatches will overbalance the difference in cost between a good machine and one of inferior construction.

It is best, for a while, to combine the natural and the artificial methods. With this plan you still have use for the setting hens, but you will promote them from "incubators" to "brooders." About a week before the eggs in your incubator are due to hatch, remove a few of them and place under



A San Joaquin County Poultry Yard.



ried rather low. The breast should be broad and full, this feature being an indication of the qualities of the Houdan as a table fowl. The fifth toe, too, gives style and finish to the breed, and is one of its hereditary characteristics from the English Dorkings. This is a very important feature from a fancier's standpoint, since the absence of the fifth toe, or, as is sometimes the case, the presence of a sixth toe, are disqualifications of the breed.

Then there is the crest—that large, full bunch of feathers growing out of a protuberance on the head—and the beard, which is pendant from the lower part of the face. The crest and beard, when properly proportioned with black and white, are the most pronounced characteristics.

In plumage the Houdan is black and white in the proportion of four solid black feathers to one tipped white. This is a correct Standard marking, but is never attained throughout the fowl.

birds to catch cold, is overcome by providing sheds under which they can be kept during this season of the year.

A. H. CURRIER.

HELPFUL HINTS FOR THE PROSPECTIVE POULTRYMAN

While it is obvious that the big poultryman could not succeed without the incubator, brooder and other modern appliances any more than could the farmer deprived of his up-to-date machinery, there are a great many persons who, for one reason or another, wish to engage in poultry raising in a small way.

This article is written in the hope that it may be of some help to this large and ever-increasing class of readers.

If you are going into this thing for pleasure or recreation, you will naturally want fowls of a purebred variety, and you can not afford to keep any other kind if you are interested in the financial end of the game,

the hens. The hen seems to feel it her duty to hatch some eggs before she will own any chickens, but she is not particular whether she sets one week or ten, or whether she has one chicken or twenty. In any event her maternal instinct is satisfied.

The following described coop of the open-front style has proved very satisfactory: Dimensions, 4 feet by 6 feet, 4 feet high in front and 2 feet at eaves. The 4x6 space is divided by a removable partition 2 feet high, and the three-cornered space above filled by poultry netting. This makes ample room for two broods in each coop. A strip of inch mesh netting (3 feet by 6 feet) fills the front space to within a foot of the floor. This space is boarded up, with the exception of two small doors for the chickens to go in and out. There are two large doors in front to cover the space filled by the netting. These are hinged at the top.

With your incubator, your setting hens and a few of these coops you can

raise several hundred chicks each season. When you reach the limit of profitable production under this system, you are ready to take up artificial methods in their entirety and be reasonably sure of success.—E. E. Hopkins in American Poultry Journal.

SOME EXPERIENCES WITH UNRULY SETTING HENS

The Live Stock and Dairy Journal—When time to hatch, early last spring, I set an 8-year-old hen (our family hen we call her. She never fails to bring two hatches each year). I set her on a choice setting of eggs, and when she had set about ten days it began to rain and her nest got full of water, and it kept raining until nearly time for the eggs to hatch. I felt rather blue, thinking that the eggs were spoiled, but when, on the morning of the twenty-first day, I went out to investigate I found that every hatchable egg had hatched, and that I had a nest full of lively chicks.

Later on in the summer the chicks began to die in the shell when time to hatch. Some would pip the shell, but would die, and in some instances the shell would dry on them. So I began about the eighteenth day to sprinkle water on the nests every two or three days until the eggs hatched, and I had very good luck.

So now when the chicks are about to pip the shell I wring out a cloth in warm water and fold it four thicknesses over the eggs and leave about two minutes, when they are partially hatched. If they are slow to hatch I repeat the same, and never lose a chick. Some times when an egg is pipped it can't hatch, so I break the large end of the egg all around and the chick soon is out.

One night recently, on the twentieth day of setting, a hen left her nest and I found her eggs real cold. They were a setting of my choice White Orpingtons, so I took them to the house and put them in real warm water, about 103 degrees, and left them two minutes while I warmed a blanket and folded it in four thicknesses. In this I wrapped the eggs and put in my warming oven, where I allowed them to remain for half a day until another hen finished her hatch, and then put them under this hen, and she hatched twelve little beauties, which included every hatchable egg. Of course, she was the old family hen. I gave her both hatches and she has as fine and lovely a brood as you would want to see.

These were some of my experiences after I had lost several settings of valuable eggs, and I hope they will help to solve problems for others.

MRS. V. F. FITZSIMMONS.
San Joaquin County, Cal.

Early breeding of heifers does a great deal in checking proper development. Many farmers are too anxious to breed their heifers before they are sufficiently matured, and it is not unusual to have them freshened before they are two years of age. Between 27 and 30 months is the best time to have them freshened, although there are exceptions to the rule, as a great deal depends upon the individual.

Many breeders and farmers signify their willingness to assist in the great campaign for the improvement of live stock on California farms by advocating the more general use of purebred sires.

Fowls left just to wander around and pick up their own living won't pay.

Pheasants

The Live Stock and Dairy Journal—The State Game Farm not only raises pheasants to stock the State for the benefit of the licensed hunter, but we wish to encourage the general public in a healthful, fascinating and profitable business. In justice to scores of persons who have taken up pheasant raising for pleasure as well as profit, and to the bird in particular, I am compelled to pull down my visor and go a little deeper into the subject with the writer, who, in *The Live Stock and Dairy Journal*, puts before the readers many features of the "game" that are absolutely wrong. For instance, the tameness of the parent bird has no effect on the chicks that are hatched and brooded by chickens or artificially. Put a brood of pheasant chicks hatched from eggs of a pet bird in a field with a tame broody chicken and they will grow up as wild hornets; again, the chicks from the wildest hen, raised close to the back door, will grow up tame.

The period of incubation of the various pheasants mentioned in the article is wrong and would confuse and bring bad results to a beginner. The time of incubation varies. Ring-Neck eggs will hatch as follows: In May, 22½ days; June, 23 days; July, 24 days. Silvers require twenty-four hours longer and Golden twenty-four hours less than Ring-Necks.

Regarding the clipping of the wings at seven weeks will say that the chicks are well able to fly over a six-foot fence before they attain the age of three weeks.

It is not right to mislead people by advocating any particular breed of chicken to brood and hatch pheasants. A turkey hen is far ahead of a Bantam. A cracker box and a yard of flannel, properly handled, will give better results in brooding. No disease or vermin peculiar to the chicken to contend with, and no trips to "pheasant heaven" by having a neck stepped on."

We have a number of Golden Pheasants at the farm, but none of the dancing variety. Read the article of a Stockton writer in which the Golden sings. There seems to be a great chance for some theatrical manager here. I would ask the writer in question how many pheasants the writer has raised.

Including pheasants, turkeys, guinea fowl, partridges and quail, we will handle 20,000 eggs at the farm this season, and none of the chicks will call a hen "mother." All will be hatched and brooded artificially.

WILLIAM N. DIRKS,
Superintendent State Game Farm,
Haywards, Cal.

[In justice to Emma J. Mellette and Mary P. Marshall, who have been contributing articles on pheasants to the *Journal*, the above letter was submitted them that they might defend the statements that Mr. Dirk declares misleading, and also reply to his criticisms. Their answers follow.—Editor.]

Although the writer of the above has attained to the high and mighty position as Superintendent of the State Game Farm, it is hardly becoming that he should endeavor to lord it over the amateurs who are working for themselves and raising pheasants, not only in their "back yard," but also in their front yards. As for myself, I do not claim to have hatched and brooded artificially 20,000 chicks in any one year, nor in any number of years, of pheasants, turkeys, quail, guinea fowl nor partridges. However, when I claim that a Bantam hen is the best thing to incubate and brood pheasants, I do so advisedly, and I write, not for the

man who can handle 20,000 eggs, but for the small grower who may not have even eggs enough to fill a small incubator. At my hand I have Gene Simpson's "Pheasant Farming." Now, Gene did not get his knowledge of pheasants experimenting in his back yard. He has a game farm of his very own. He was doing such wonderful things that the state of Oregon took notice and leased his farm for three years, retaining him as Superintendent. I quote from his book:

"Pheasants may be hatched in incubators and reared in brooders, but unless the breeder has had practical experience in raising chickens by artificial means much better results will be obtained by setting pheasant eggs under common hens, Cochins Bantams preferred."

Yet Mr. Dirks says:

"It is not right to mislead by advocating any particular breed of chicken to brood and hatch pheasants."

As I said before, I write for the small pheasant grower. The man who can handle 20,000 eggs in a season does not need any advice, even if it were quoted from experts, for he knows it all himself.

When I say a smallish Rhode Island Red or an Orpington of like weight is next best to a Bantam for hatching, I say this advisedly also, through experience gained between thirty-five and forty years at handling setting hens, that has taken me through almost a whole gamut of incubating breeds, and several "breeds" of incubators also. The greatest trouble in hatching with big hens comes in the nest, before the chicks are out enough to be put into the "cracker box brooder."

H. H. Collier is a man whom none will deny is a keen observer. In the *Northwest Poultry Journal* he says, on the subject of pheasant growing:

"One of the prominent pheasant growers of Tacoma told the writer a few days ago that he could find a market for two hundred Cochins Bantams if he could find them. He said that his egg orders (pheasant) had been larger than he could fill, and that most all who buy pheasants want the Bantam hen to go with the setting."

Personally I am raising some Buff Cochins cross-bred Bantams that I expect to make good setters and mothers—i. e., a Bantam male bred with a common smallish hen of like color. This breeds some of the feathers off the legs and makes the setter a trifle larger. One pheasant grower whom the writer knows uses a cross of Rhode Island Red and Bantam. Any hen that is not wild and that is not too heavy is, of course, good, but it is the writer's experience that the before-mentioned breeds set the quietest of any. With regard to the time taken to incubate the eggs, I quoted from the pen of W. F. Kendrick of Denver, who is President of the American Game Association, and who has "Kendrick's Pheasantry" so large that he has eighty or a hundred coops during the busy season, and the cooking for the birds is done in the fields, and the men live and sleep near the birds. If he makes a mistake as regards the exact number of minutes it takes to hatch an egg, this little world will wag on just the same, and the chicks will be out of the eggs "when they are done hatched."

It is a whole lot easier to brood a few pheasants and quail in the back yard of a city lot than it is to incubate and rear artificially 20,000. It puts the writer in mind of an old doctor who, in speaking of the denizens of a little suburban town of Denver, said:

"The trouble with the people in that

little town is that their hind sight is better than their foresight."

We shall see what we shall see, and this fall, when the birds are turned out along the streams and in the fields for the "licensed hunter" to shoot at, the question is, How many of that 20,000 will be in at the roll call?

As to the progeny of tame birds going wild if turned out in the field, again the writer will say: I am not writing for people who have the money of the State at their back; not writing for people who turn their birds out in the field. I will admit that any bird turned out in the field, would get wild. A brood of "Jasacks" turned out in the field would get wild also. The average amateur does not turn his birds out in the field. He has no "fields" that are wired fit for a pheasant. A man with the State's money at his back can do this, and he thinks it sounds big to say, "turned out into the field." The writer has heard him use this phrase regarding some Reeves pheasants that got to acting unpretty.

Long live the State, and long live its game farm. When the accounting time comes this fall, may there be the full quota, and may full 20,000 eggs, grown into pheasants, turkeys, quail and guineas, all go through the gates, every incubator-hatched, artificially-brooded chick of them. Selah!

EMMA J. MELLETTE.

Haywards, Cal.

THEORY VS. PRACTICE.

The Live Stock and Dairy Journal—I will say to Mr. Dirks with all due deference to his knowledge, that it seems to me to be a case of theory versus practice on his part. I speak from EXPERIENCE ONLY, and I KNOW what I am talking about. I wish that he would call on my "birds." Perhaps he would like to be "theatrical manager" to my "freaks." The Golden have a matinee every day (through the breeding period). I am afraid he does not carefully observe their habits.

I will say that I have never tried to mislead any one, and am interested in the industry, so always have endeavored to simplify as much as possible. Yet is the little details that lead to success.

MARY P. MARSHALL.
Stockton, Cal.

CHICO POULTRY ASSOCIATION

The Chico Poultry Association has been formed at Chico, Butte County, Cal., with the election of the following officers: John C. Daly, President; W. F. Pilgrim, Vice-President; George B. Kelley, Secretary, and Henry A. Eames, Treasurer.

The membership fee will be \$1 a year, and a committee has been selected to commence immediately to secure members. The committee is Henry Eames, G. B. Kelley, Mrs. J. A. Peck, Charles Fear and W. F. Pilgrim. A Committee on Constitution and By-Laws is composed of G. B. Kelley, C. K. Gibson and W. F. Pilgrim. The Directors of the association are William Robbie, Henry Eames, C. K. Gibson, Charles Fear and Mrs. J. A. Peck.

It was decided to give a poultry show during the spring festival, beginning Friday, May 3d.

The Pioneer Hatchery, Los Angeles has just issued a 64-page book full of valuable chicken information. It will be mailed free upon request. See also their display advertisement in this issue for reasonable money savers,

Questions and Answers

EDITED BY A. H. CURRIER.

A valuable and instructive feature of our Poultry Department is "Questions and Answers." Any of our subscribers desiring advice or information upon any matter pertaining to poultry raising will please address Poultry Editor, The Live Stock and Dairy Journal, Sacramento, Cal., and answers will be printed in this department.

Please tell me something about the feeding value of alfalfa meal. To what extent will it take the place of wheat and oats in poultry feed; or, would it be used only as a means of supplying green food during the winter?—D. O. M., Kerman, Cal.

Answer—Alfalfa meal is a good food, but it will not take the place of wheat and oats, except in so far as helping out in bulk and nutritive value of the ration, it also helps to cut down the amount of other foods consumed. Feed in a dry, or moist mash. We always prefer freshly cut alfalfa or kale when it can be had. Put first-class alfalfa hay in half-inch lengths, soak over night, and mix in moist mash for morning feed. Alfalfa may be used as high as one-fourth part. We prefer to feed it moist with a morning feed. In buying alfalfa meal, get a good, coarse-ground, green tincture, that is free from fine dust, sweepings, or other waste materials, used to add bulk and weight, at expense of feeding value and wholesomeness. Alfalfa of good quality, contains about one part of tissue building material, to three or three and one-half parts of heat and fat producing material. The different brands of alfalfa meal vary a great deal in feeding value and it is best to buy only from sample and insist on goods being delivered equal to sample in quality. Cheap, or poor alfalfa meal is practically worthless as feed.

TURKEY GROWING.

Please give ration and recommendations for caring for turkeys.—B. A. C., Corning, Cal.

Answer—Turkeys require free range, unrestricted if possible, and on new land. Do not let them run with common fowls or water fowl. Natural methods in hatching and rearing are best. Little turks should be kept on restricted range, and should not run in tall grass and weeds when weather is wet. Do not try to house turkeys. An open shed makes the best roosting quarters for young stock, and adult birds prefer to roost in the open.

A good ration for young turkeys is the following: Hard boiled egg, mixed with dry bread crumbs or cracker crumbs; crumbs made just moist with milk, dry cheese from clabbered milk, and lettuce or kale chopped with a few onions. Insects, bugs and worms should be had from the range make the best and safest animal food. They will begin to forage when a week old with a good mother. Feed a little cracked wheat or steel-cut oats at night to encourage them to sleep at home. Good, sweet, dry grain is the best food for adult turkeys. Be careful about feeding new grain, as it is liable to scour them. Light feeds in the morning of wheat or corn and a good feed at home at night just before roosting time, with the day to range on a good range is the most satisfactory way to feed after they are one-third grown. Milk or cheese, as mentioned, makes an agreeable variety of food, and is well relished.

I am writing to ask for information regarding a disease among my chickens. The symptoms are as follows: They begin to droop around and fail to eat, and get very thin. The crop seems to be full all the time. I cut two hens open and the liver was enlarged and one liver was spotted and hard.—Mrs. J. C. W., Hay Fork, Cal.

Answer: Give one small calomel tablet every hour for one day to sick hens. Three hours after last tablet give one liver pill. If crop is full give one tablespoonful of castor oil instead of liver pill, and work crop with your hand until soft.

Give all your flock a tonic made up of copperas one pound, oil of vitriol one ounce, dissolve in one gallon of water.

Use one teaspoonful of this mixture to one quart of drinking water. Repeat the calomel tablets the second day after, if the first dose is not sufficient.

FEEDS FOR POULTRY.

No matter whether the flock is large or small, it is as well for the poultrymen to have some knowledge of the percentage of the digestible matter in feeds usually given to the chickens, says H. L. Blanchard, poultry expert at the State College at Pulliam, Wash. Here is a table that may help one to understand this:

	Carbohy- Protein.	drates.	Fat.
Red clover.....	6.5	34.9	1.6
Alfalfa	7.6	37.8	1.3
Corn	7.1	62.7	4.2
Wheat	9.3	55.8	1.8
Oats	9.1	44.7	4.1
Bran	12.6	44.1	2.9
Linseed meal	27.2	31.8	2.7
Meat scraps	68.4	.3	13.5
Skimmed milk	3.1	4.7	.8

From the above table you can study out your own problem. If you desire to fatten fowls you might profitably feed corn liberally, which contains over 62 per cent of carbohydrates. On the other hand, if you wish to feed to produce eggs, meat scraps, linseed meal and bran should be included in the rations.

Wheat contains 9.3 per cent protein, 55.8 per cent carbohydrates and 1.8 per cent fat, and is not only a good fattening food, but is also a muscle building food. Oats, containing 44.7 per cent carbohydrates, is not as good a fattening food as wheat or corn. Bran is high in protein, and is not of much use for fattening. Skimmed milk analyzes well, and is an excellent feed for poultry.

As a ration for a small flock a mash is made as follows:

1 pint of bran, ½ pint of oatmeal, ½ pint of corn meal; salt and stir to a crumbly mash. Do not permit it to be sloppy.

For one dozen hens—Morning, two quarts of the mash above described. Noon, one pint of wheat and oats in litter. Night, one quart of oats and corn, equal parts, in litter. Supplement with green stuff, grit, shell and plenty of good, fresh water.

We realize that by far the larger percentage of people have small flocks, say two or three dozen hens. The ration for small flocks given herewith is very good in our experience, but does not take into consideration the table scraps, which can be used very advantageously, where we desire to make the expense as light as possible. We would take all table scraps and put them together in a vessel of convenient size, and once every day or every two days, whichever suits, cook the stuff for the chickens. Milk is good to mix with the scraps. If you do not have milk, then cook them in water. This plan will cut down expenses materially.

On the other hand, table scraps may be fed with satisfactory results. I have seen people who throw out the scraps without preparing them. Then they might throw out some wheat or other cereal without taking into consideration the egg-producing properties of either the grain or scraps. By referring to an analysis of foodstuffs one can easily learn approximately the egg producing properties of the meat scraps or other discarded food which composes the table scraps.

HUNTING AND SHOOTING WITHIN NATIONAL FORESTS

Acting District Forester John H. Hatton of San Francisco has issued a statement correcting an impression which is apparently gaining ground with reference to hunting and shooting within the National Forests. In some quarters the impression seems to have become current that shooting is entirely prohibited, and on this account native beasts of prey are becoming increasingly serious. The impression is quite contrary to the actual conditions. The Forest Service encourages, as much as its funds will permit, the extermination of predatory animals, and in many instances employs hunters for this purpose. In other cases ammunition and traps are purchased and loaned free to trappers who make hunting and trapping a regular business.

The only prohibition to hunting within the forests are those prescribed by the State game laws, and there is no difference between the application of these laws inside and outside the forests. It is fully realized by the service that coyotes, mountain lions, wolves, etc., are a serious menace to the live stock industry within the forests, and the service has always taken the attitude of co-operation in the extermination of these animals.

A GOOD POULTRY TONIC.

Onions chopped fine and mixed with the hens' food occasionally will promote health. They are a great poultry tonic, relished by old and young.

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POULTRY DEPARTMENT.

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Examine our stock and know what you are purchasing

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Place your order now for next season's breeding cockerels.

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HOPLAND, CAL.

Poultry Breeders' Directory

Under this heading, for a nominal charge, payable in advance, we will insert names and addresses of breeders of various varieties of poultry. This is done for the convenience of owners of flocks who wish to keep their names before the public the year round. Display advertising is undoubtedly the big business getter of today, but no doubt there are many breeders who are not justified in carrying a display ad during the entire year. To such breeders the economy and convenience of this column is readily apparent.

S. C. WHITE LEGHORNS.

M. Duttbernd.....Petaluma, Cal.
E. W. Trout.....Salinas, Cal.
Oaklawn Poultry Farm, Kirkwood, Cal.
C. B. Carrington.....Hayward, Cal.
J. H. Meyer.....R 3, Modesto, Cal.

RHODE ISLAND REDS.

Mrs. Jessie Hinkle.....Folsom, Cal.
Jack Lee.....R. 3, box 58, Petaluma, Cal.

BARRED PLYMOUTH ROCKS.

F. W. Hardman.....Volta, Cal.
L. N. Cobbledick & Co.....Oakland, Cal.

BUFF ORPINGTONS.

C. E. Futrell.....Visalia, Cal.

WHITE ORPINGTONS.

Dr. V. B. Watson.....Castroville, Cal.
Mrs. O. S. Moore, R. 1, Bx. 49, Modesto.

WHITE WYANDOTTES.

Dr. V. B. Watson.....Castroville, Cal.
M. A. Pilgrim.....Chico, Cal.
A. L. Jenkins.....Sebastopol, Cal.

BUFF LEGHORNS.

Frank Craig.....Larkspur, Cal.
P. Ellis.....R. 3, Modesto, Cal.

ANCONAS.

O. E. Palmer.....Dinuba, Cal.

BLACK MINORCAS.

W. A. Gerdes.....Pacific Grove, Cal.
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L. N. Cobbledick & Co.....Oakland, Cal.

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Mrs. I. H. Tuttle.....Watsonville, Cal.

S. C. RHODE ISLAND REDS.

Mrs. M. A. Saylor.....Orland, Cal.
B. H. Brubaker.....Corning, Cal.

ROUEN DUCKS.

Mrs. F. W. Butler.....Princeton, Cal.

INDIAN RUNNER DUCKS.

Mellette & Co.....Haywards, Cal.

PHEASANTS.

Mary Marshall, 345 South American Street, Stockton, Cal.

CARNEAUX PIGEONS.

Frank Craig.....Larkspur, Cal.
A. Monahan, 3340 Brookdale Avenue, Fruitvale, Cal.

CRESTED TURKEYS.

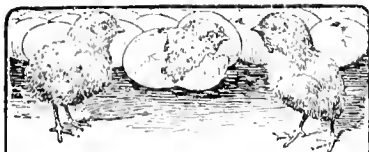
In a recent issue of *The Live Stock and Dairy Journal*, in connection with the Corning Poultry Show, Judge Currier made mention of a special attraction being a pair of crested Bronze turkeys, shown by F. A. Hersey of Corning, and noted that such turkeys were very rare. In this connection the following, by Miller Purvis, and published in an Eastern exchange will interest our readers:

"It is probable that a crest on a turkey represents the coming to the surface of the blood of a very remote ancestor of the crested bird. The wild turkey of the United States is not a crested breed. Although history fails to mention the fact, it is probable that we originally got our domesticated turkeys from Europe, although Spain, France and England first got these fowls from America. It is altogether probable that the first turkeys seen in Europe were taken there by Spanish adventurers to the New World who got specimens from the Indians of Mexico and took them home with them. The first authentic records we have show that turkeys were taken from America to Spain in 1500. The early Spanish explorers and soldiers of fortune found the turkey plentiful in New Spain, the Mexicans having large flocks of them in domestication. They were found wild as far as the mouth of the Orinoco River on the east coast and as far as the borders of Peru on the Pacific Coast of South America. In the isthmus country there was a smaller sort of turkey with a crest consisting of a single row of feathers on the top of the head. The Mexican turkey (*Meleagris Mexicana*) is black, while the wild turkey of the United States (*Meleagris Americana*) is a brilliant bronze with white markings, our Bronze turkey of today being an exact reproduction of the wild turkey. I have been unable to find any mention of wild turkeys having been found in the eastern part of this country by the first settlers, but frequent mention is made of them by early writers as having been found everywhere west of the Appalachian range of mountains. It is probable that the infrequent specimens which show a crest hark back to a remote cross between the wild turkey of Mexico and the crested turkey of Honduras and the southern part of Mexico. However, this is only theory based on the fact that the two varieties will interbreed."

GREAT INCUBATOR INDUSTRY.

Such rapid strides has the Petaluma Incubator Company of Petaluma, Cal., made in the introduction of Petaluma incubators and brooders that it has become necessary to acquire the use of a building adjoining the factory in which to install a large force of workmen to keep pace with the demand for these goods.

A representative of this journal called at the office of the company recently and noticed immense shipments of incubators and brooders going out to various sections of the country, some marked for very remote parts. He was informed that the factory was busy at that moment on a large order consisting of an entire carload of Petaluma incubators for ostrich hatching for South Africa, making a little over four hundred of these large incubators to this section in about a year. Within the past week a quantity of these were also shipped to Carl Hagenhack, the great

SMITH'S UNIVERSAL
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Profitable Poultry Raising
Instead of Failure.

Perfect food for infant chicks, turkeys and pheasants. (Dry mixed.)

No preparing, mixing or wetting. No bowel trouble or other diseases.

Agents for Entomocide, Coulson's Foods, Mealfalfa, Petaluma Incubators, Arenberg Brooder Stoves, Conkey's Goods, etc.

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M. DUTTERND,

R. I, Box 92-3, Petaluma, Cal.

**For Additional Poultry
Advertisements See
Classified on Page 24**

**This Coupon
Worth . . 35c**

Return this coupon and 35 cents (cash or stamps) and we will send you *American Hen Magazine* until January 1st, 1913 (regular price 70 cents). This gives you 70 cents worth of the **BEST POULTRY JOURNAL PUBLISHED** for only 35 cents. *American Hen Magazine* has reliable writers on all subjects pertaining to poultry, fruit, pigeons, nuts and bees. It contains valuable information on how others have made from \$6,000 to \$20,000 a year from the investment of only a few dollars.

Joel M. Foster, a young man, made \$19,484.83 in one year. The Curtis boys made \$100,000 from their chickens. Mr. Parrin made over \$1,300 on a village lot. The Cornings (father and son) made \$12,000. One man made over \$35,000 in two years. Ernest Kellerstrass made \$18,178.53 last year. E. R. Philo made \$1,500 from 60 hens in 10 months.

Many others are making a snug fortune each year. Are you? Remember, you can make an independent living from chickens **ON A CITY LOT**, right in your own **BACK YARD**. Read "A Fortune Raising Chickens on the No-Yard Plan" in *American Hen Magazine*.

Return this coupon and thirty-five (35) cents today. A single copy is worth more than \$35.00 to the man, woman, boy or girl who wants to **MAKE MONEY FAST**. (Published each month.)

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wild animal trainer of Germany, who first began buying these incubators during the World's Fair at Chicago, and has been buying ever since.

Petaluma incubators were recently awarded a grand prize at the Turin, Italy, Exposition, making the second prize of this class won by these incubators, which means very much, as no other incubator made in any part of the world has ever received such high recognition.

The fact that this company has sold several carloads this year of Petaluma incubators and brooders from their Indianapolis, Ind., office and warerooms shows how these goods stand in the East, and proves that people, no matter where located, want the best made. Hence, the enormous sales of these justly celebrated incubators and brooders.

It is so well known that "to be well born is half raised," that people ordering day old chicks from the hatcheries specify "These chicks must be hatched in Petaluma incubators."

This factory means a great deal to the community in which it is located, for the pay roll runs into a large sum weekly.

Petaluma incubators have won their present status entirely upon merit, and the men behind it enjoy the confidence of the people at large, which is a combination difficult to beat.

METHODS TO PREVENT EGGS FROM HATCHING

The Live Stock and Dairy Journal—I have read in an Eastern paper an item giving some good methods of preventing eggs from hatching. Parties having purebred fowls often market surplus eggs in the store and want to be sure they are not used for hatching. I have often had inquiries from poultrymen on this same proposition, and believe that the following will interest many of your readers.

Put the eggs in a colander and pour boiling water down through them. This does not injure the eggs in the least and will prevent them from hatching.

Another plan is to wipe them with a greased rag. Take a piece of thick muslin and grease it with lard until it is real greasy. Wipe the eggs with this rag and then with a clean one and they will not hatch.

One can dip them for a few minutes in a solution of one part of waterglass to eleven parts of water. This will not only prevent the eggs from hatching but will seal the shell so tightly that the eggs will keep good for weeks. I ate eggs for my breakfast Feb. 14 which were laid last June. They have been kept in a solution of waterglass ever since and are better than any cold storage eggs I ever saw, although not quite so good as fresh eggs. However, they are as good as any egg will be after it is kept two weeks. T. B. RUSSELL, Contra Costa County.

Feeding hogs for best results is a big problem and every "hog man" should make a study of it and try to improve upon his mistakes.

Feeding hogs that are kept for breeding stock and hogs that are intended for market are two entirely different propositions, and each farmer must use his judgement in the matter of ra'ons.

It is a mistake to feed all sizes of hogs together, as the small ones will invariably lose out.

Buying dairy feed is expensive, often times extravagant. Plan your farm to reduce the necessity of buying additional feed to the lowest point. This is an interesting problem that takes much planning to solve.

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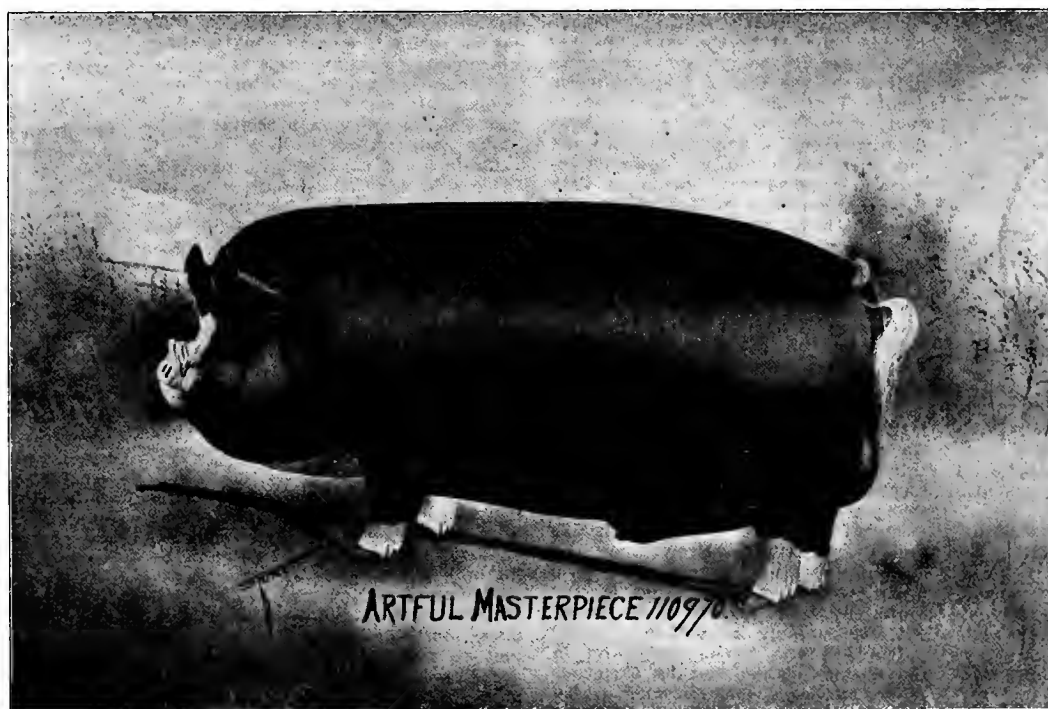
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THE LIVE STOCK ***and DAIRY JOURNAL***

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

JUNE, 1912



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An Illustrated Monthly Publication for the Advancement of the Live Stock, Dairy and Poultry Industries of the Pacific Coast.

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If you want to buy or sell any stock or merchandise in the great live stock, dairy and poultry centers of the Pacific Coast, get in touch with our advertising columns. We believe all advertising in this paper to be from persons or firms of the highest reliability. Every effort is made to protect our readers against misleading representation. We shall at all times appreciate evidence that advertisers have acted otherwise than in accordance with principles of strict business integrity.

The Journal is issued on or about the 5th of each month. Copy for all reading and advertising matter must be in our office not later than the 25th of month preceding date of issue.



THAT NEVADA PROCLAMATION

On May 14th Governor Oddie of Nevada issued the following remarkable proclamation:

"State of Nevada, Executive Department, Carson City. A proclamation by the Governor.

"Whereas, It has come to my knowledge through a petition of stockmen of western Nevada, praying for a proclamation of quarantine against a portion of the State of California satisfactorily appearing to be affected with the following contagious diseases prevailing among the live stock of such portion of said State, to-wit: Texas, splenic or tick fever, tuberculosis, black leg and anthrax; and

"Whereas, It appears that their shipment into and presence upon the ranges of this state is a menace to the cattle industry of the state of Nevada; and

"Whereas, In order to protect one of the principal industries of this state it is necessary that said disease be not allowed to be spread among our cattle and on our ranges.

"Now, therefore, I, Tasker L. Oddie, Governor of the State of Nevada, do, by authority of law in me vested, hereby prohibit the shipment or importation into this state of cattle from that portion of California lying south of Mount Diablo base line, hereby declared to be an infected district and quarantined against, which are diseased or infected with any of the contagious diseases in this proclamation

above mentioned, or which have been exposed to any of said contagious diseases; and do hereby urge upon all officers, whose duty it is, or may become, to rigidly enforce said quarantine;

"Provided, That said prohibition shall not apply to any cattle being transported through and beyond the limits of this State by any railroad company by permit or authority granted by any agent or inspector acting under the instruction and authority of the United States Government.

"Given under my hand and the Great Seal of the State of Nevada, at the Capitol in Carson City, this fourteenth day of May, in the year of Our Lord one thousand nine hundred and twelve.

"TASKER L. ODDIE, Governor.

(Seal) By the Governor:

"GEORGE BORDIGAN,
Secretary of State."

The remarkable feature of this document appears to be the fact that it was issued on erroneous information, and that it intentionally or otherwise places upon the cattlemen of a great section in California the burden of a condition which does not as a matter of fact exist.

The motives behind the petition of Nevada cattlemen, who brought about this proclamation, may be those of a genuine desire to protect their herds against contagious diseases. In that event it is quite evident that they are totally ignorant of sanitary conditions existing in California at the present time. The district placed in quarantine by Governor Oddie's proclamation is bounded by the same lines as was a district many years ago quarantined by the United States Government. That might lead us to believe that someone in Nevada has been digging about in ancient records and has just discovered the presence of certain diseases in a portion of California, when as a matter of fact the diseases have been as nearly eradicated as in any section of the country where there are numerous herds, and where the United States Government many years ago raised its quarantine restrictions after the Federal sanitary authorities, in co-operation with the California State authorities, had completed a sanitary campaign which had resulted in the almost complete eradication of the diseases mentioned in Governor Oddie's proclamation.

In all of California the only territory where cattle ticks are found at the present time, is a small area in western San Luis Obispo, and also San Diego County. Even these sections are not badly infected, and while under the strict quarantine of the State, cattle are allowed to be moved out after passing inspection.

The sanitary work carried on in the district singled out by Governor Oddie, has been most thorough, which is perhaps best illustrated by the fact that while it was once quarantined by the United States Government, yet as a result of the sanitary work done, more territory in the section in question has been released from quarantine in the past ten years than in all other tick infected areas in the country combined.

All other States in the United States, nearly all of which by the way have efficient sanitary officers, allow the movement of cattle from this territory, and just why Nevada of all States, should raise the present bar on purely sanitary grounds, is a question hard to answer, for Nevada has no State live stock sanitary officers, we believe, except a Board of Sheep Commissioners, diseases among cattle, horses and swine being practically unlooked after by the State. If memory serves us rightly, it was during the present term of office of Governor Oddie that the office of State Veterinarian was abolished.

Now if the motives behind the peti-

tion which resulted in the Governor's proclamation were other than for real reasons of sanitation, what could have been their source?

Is it not a fact that from the district quarantined against come most of the cattle to the summer ranges of eastern Mono and Alpine Counties? Does not the most convenient route to these ranges lead through a portion of the State of Nevada and thence back into California?

Is it not a fact that the cattle men of western Nevada depend to a considerable extent upon the hay crop of eastern Mono and Alpine Counties for winter feed? In a year when grass growing conditions are below normal, would not the ordinary movement of cattle to these ranges affect the winter hay supply? And if by the process of a Governor's proclamation such movement of cattle could be curtailed or prevented altogether, might not the cattle men of western Nevada avail themselves of the opportunity? In the absence of any justifying facts which would seem to warrant the proclamation as it appears, we can only speculate as to the real reasons behind it and ask, "Why?"

CALIFORNIA DEVELOPMENT.

In spite of the tons of advertising literature which have been sent broadcast, setting forth the advantages of California soil and climate, we have ample testimony from those who are actively engaged in California publicity work in the East that very few people realize the truth about California and the Pacific Coast in general, and there is no more convincing argument in favor of the advantages of this great slope than a recital of the plain, undecorated truth.

California is particularly pleasing to the eye at this season of the year, and one of the wonders of the State is the general view of the Sacramento Valley. The green carpet of its floor reaches to the north and to the south as far as the eye can reach, to the west it shades into the brown tones of the Coast Range, and to the east blends into the purple of the foothills, crowned by the glistening snow-capped peaks of the Sierras. In the Valley itself one is immediately struck by the hundreds of spots which are beautifully envired as sites for country homes.

To the man who is interested in the material progress of the valley, comes a gratifying sense of development as he sees the many new homes now being built, these homes forming the central figures in groups of new, substantial farming establishments. To give something of an idea of the extent of this building development, we noted carefully on a hundred mile ride in the lower Sacramento Valley, and in the whole distance there is not a single moment when one may not look out of the car window and see from one to a dozen new farm buildings, either completed or in the course of construction. Then, too, one sees the evidences of the new ideas of the cultivation of the soil in the valley. Lands which were practically barren only two or three years ago are now producing good crops of alfalfa, and thousands of acres of young orchards are approaching their fruitful years. While much of this has been made possible by the formation of irrigation districts and by irrigation projects constructed by private capital, yet one of the big factors which is contributing to successful irrigation is the private pumping plant, the equipment of which is within the means of the smallest land owner. The distribution of the life-giving water throughout the valley has brought about the production of the foods upon which animals thrive and fatten, and the natural consequence is a rapidly increasing number

A VOICE FROM NEW MEXICO

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M. E. HOUGLAND,
Mountainview, New Mexico.

of dairies, swine herds, and herds of horses, mules, beef cattle, and flocks of sheep.

The development of the agricultural resources of this great valley is one of the most absorbingly interesting features of California progress today, and a trip through the length of the valley two years from now will be like traveling through a strange new country.

THE APPOINTMENT IS APPROVED

The appointment of D. O. Lively of Portland, Ore., to be chief of the Department of Live Stock of the Panama-Pacific Exposition meets with general approval among the live stock men of the coast. We had the pleasure of meeting Mr. Lively for the first time at the meeting of the California Live Stock Breeders' Association in San Francisco in January. He has a very pleasing personality, is energetic, enthusiastic and a great booster for the live stock interests in general. We predict that the Live Stock Department of the Exposition will be a great success under his able management.

ADDITIONAL PAGES APPRECIATED

The editor has received several letters from subscribers stating that the May issue was the best yet. We are glad that the additional pages of reading matter are appreciated, even though we have had to drop our attractive colored cover. After all, it is the contents of a publication that count, rather than a flashy cover. Our constant aim is to keep our reading matter up to a high standard, and to provide as many appropriate illustrations as can be obtained, and we know from the letters received that we are "going in the right direction," as one subscriber expresses it. And in this connection we wish to say that we owe a great deal of our success to the co-operation of our readers, many of whom have responded so willingly in sending in articles, letters, items, cuts and photographs. Let the good work continue.

SWEEPING CHANGES.

Sweeping changes will probably be made in the directorship of the California State Agricultural College at an early date. The trend of contemplated changes is toward the placing of its management in the hands of men who will give it vigor and efficiency. Under the direction of the new heads, the State Agricultural College will no doubt be raised to a degree of efficiency in keeping with the vast agricultural resources of the State, and with capable, vigorous men at the helm, California will be liberal with her appropriations until her Agricultural College shall stand as the best equipped and most efficient in the land.

The future usefulness of any cow depends largely upon how she is brought up. By a right system of care, we can so develop the growing heifer that she will have an added value as a cow. There is much in brood and much in pedigree, but these are worthless unless the feeding and care are such as to develop the natural tendencies of the breed.—Live Stock Journal.

THE LIVE STOCK and DAIRY JOURNAL

Volume 11

SACRAMENTO, JUNE, 1912

Number 6

The Value of Molasses in the Balanced Ration

As more intelligent attention is being given to the feeding of live stock than ever before, the value of combination foods and balanced rations in which molasses is used, are coming in for their share of appreciation. Even in those sections of the country where alfalfa is most abundantly grown, dairymen and other feeders of live stock have found the molasses feeds to effect a substantial economy both in increased production and in initial cost of feed. Until quite recently there has been no accurate data upon the exact values of molasses feeds, but an increasing number of dairymen and horse owners who have kept records, bear out the claims of the manufacturers who market these products.

In placing the molasses feeds before the feeding public, the usual difficulties are encountered and the following from Flour and Feed, Milwaukee, sets forth some pertinent facts:

It is one of the strangest anomalies in this feed question, that after professors of science in the teaching of the "balanced ration" have gotten their knowledge well disseminated, now they qualify this teaching by virtually turning round and saying, that this knowledge applied only to farmers and for their sole use and purpose. Moreover, there must be only the very best grades of No. 1 grain and the very best grades of by-products used and bought by the farmer and that he must make his own "balanced ration!" It seems to have been a great disappointment to many feed officials that anyone would have the temerity to put up a large plant running into the hundreds of thousands of dollars and actually take this "balanced ration" business out of the farmers' hands. It is true "they don't actually say this in so many words," but from their actions it is put into language stronger than words.

They say to the farmer: Here, you should not trust any miller or manufacturer to do this balanced ration business for you, but do it yourself. Buy the materials—cottonseed meal, linseed oil meal, gluten feed, wheat bran molasses, (if you will use it in spite of all we have written and spoken), raise your own corn, oats, barley, buckwheat, etc., and then put it on the barn floor and mix your own "balanced ration" and you will know what you have. In thinking this problem over I have wished that as a basis everyone connected with the business of feeds could have had, and applied one pound of actual experience to about fifteen pounds of theory. This would mean, experience on the farm, in raising feed, and feeding it, then in the market where feeding commodities are bought and sold, and then in mills from which all the ingredients that go to make up a balanced ration and then to the dealer and so back to the farm. It is an endless chain. All balanced rations come from the farm originally, and in their last analysis go back to the farm. This is axiomatic and needs no demonstration. Theory says: What is the use of all

this "endless chain" business. It is a waste of time and money to raise grain and ship it to the grain dealer and have him sell it to the manufacturer, and the manufacturer take out a little flour or a little glucose and sell the refuse to the feed dealer, and he in turn sell it back to the farmer, practically where it originated. Is it not the height of foolishness? Why can't the farmer raise, make, and feed all the material in the grain he produces, without giving these other merchants, manufacturers, and dealers a "whack at it?" This is practically the line of reasoning used by these so-called scientific teachers. I should say they have spent nearly half a century, at least all the time elapsing since the discovery and use of the commodity known as protein, in the teaching and promulgating of this doctrine, or I would say theory.

beasts for food and made clothes of skins. He was not dependent upon anyone near or far for any of his immediate needs. He was self containing if not self satisfied. He did not know whether the world was round or square. If he had not cared to know we would have been living in the same "old way" today. Slowly, but surely, the world has been changing in its customs and mode of life. Mother Eve was satisfied with a fig leaf, her daughters today want something beside Linsey woolsey, and demand silks, satins and velvet.

Our scientist who wants the world small, and the family to do everything, is long out of date. The farmer no longer makes his shoes, nor does he shear, card, spin and weave the cloth for his clothes and that of his family. Imagine for an instant the condition of the farmer who would stop his plant-

to make his own feed, his own balanced rations. If their expert scientific knowledge and advice is the best way, why don't the farmer follow it. Because he has a better business head than his teacher and adviser. The logic of events, may more the actual experience shows him it is wrong and that the Irishman who said, "every man to his job" is the better adviser. We are as a people and a nation "specializing" more and more. Even the professions are recognizing the desirability and necessity of it. Physicians are attending especially to the eye, ear and throat, another to the stomach, another to the nerves, another to surgery, etc. It is the logic of the times and you can as easily dam up Niagara as to stop it.

So our feed officials are only "kicking against the pricks" when they advise the farmer to do that which experience shows him an expert in, that special line can do better and cheaper than he can. If the expert would show the farmer that he could sell his grain on the market and buy something better and cheaper and save money he would be a benefactor in his day and time. Whether he believes this "heresy" or not, nevertheless it is true. Now is the time for the expert to get on the "band wagon," so to speak, or he will fall out of the procession. The parade is going ahead with or without him. I say this more confidently than ever before. When molasses feeds were first put on the market, while perhaps they were not condemned outright, yet farmers were told not to use them. They were told they were no particular advantage, and they were wasting their money. They were not as valuable as corn for a feeding material, and that they were used to tone up and make palatable other worthless material that could not otherwise be utilized and all this was being done at the expense and to the detriment of the farmer.

What is the result? Have molasses feeds gone out of the market? Is there no place for them and no demand for them? I am sure statistics and facts will answer these questions. I am sure there has never been so large a demand for molasses feeds as during the season of 1911 and 1912, just coming to a close. Molasses feeds have not only been the best feeds on the market, but they have also been the cheapest and the demand consequently way beyond the capacity of the mills combined to supply it. Here is a question I have asked repeatedly and not an expert answers: "Where would the prices of feed have soared if all the thousands of tons of molasses feeds had been eliminated from the market?" If the law of supply and demand governs price it is easy to say that the price of other feeds would have been 25 per cent higher, molasses feeds have their place in our domestic economy and have come to stay, and it must be added in all truthfulness "in spite of the opposition of all those who should have helped along this wonderful and beneficial addition to our feed supplies."



A Profitable Solano County, California, Dairy.

The greatest preacher of all his time found it "hard to kick against the present generation because he became convinced of his error and in consequence became the greatest preacher and disseminator of truth the world has ever known. This is historical, biblical if you please, but nevertheless illustrates that the believer in error is a dangerous man, and it's doubtful if even any miraculous event could change the tenor of his beliefs. He has a miraculous demonstration every day of his life if he will only see and assimilate all that is going on around him. I don't mean all, but only that part that pertains to his immediate calling and business.

Analyzing the Problem.

Let us analyze this line of thought and carry it out to its final conclusions. I have already done so in many ways in these articles in the past months, and can only hope and pray by constant agitation to accomplish pricks." He was wise beyond our something that may be of benefit to everyone. It does seem like going back to primitive times to try and beat into anyone's head the fact that the world moves. There was a time when the man and his family were "the world." He slaughtered the wild

ing to make himself a pair of boots. He can not do it as well or as cheap as he can go to the merchant and buy them. We have been compelled by circumstances and environment to depend upon one another, in other words to "specialize" our industries to keep up with the increase in population and the consequent demand. I can remember, even in my generation, when a mechanic was not considered a first-class man who could not do a half dozen different things. He could lay a brick and stone wall and plaster a house, was a good carpenter, something of a blacksmith, a fair machinist. Today, a plumber is that and nothing else, so is a carpenter and a mason. If a farmer wants a house built he employs a carpenter because the carpenter understands that line of business better than he does, and he finds it the most profitable to give his individual attention to his own specialty, which is farming.

The Farmer Knows Best.

The changes even in a lifetime are so tremendous that they really seem miraculous. And our feed experts, our feed officials with all this open book before them, of what has been done and what is being done and the ways and how, will advise the farmer

HOLSTEINS

Two Hundred Purebred, Registered Cows, Heifers, Bull Calves.

We are offering for sale Cows and Heifers that will give from eight to twelve thousand pounds of milk per year. Many of them bred to our two great herd bulls, Sir Netherland Cornucopia and Prince Hengerveld Segis. The four nearest dams of these two great bulls average over 600 pounds of milk, 30 pounds of butter, 4 per cent fat, official records, for seven days. Conceded to be the two greatest bulls owned by any farm in the Middle West. Bull calves sired by these great bulls, some of them out of record cows.

Write us. Let us tell you more about this great herd. Quality considered, we price them right and guarantee every animal to be as represented.

WOODLAWN FARM
Sterling, Illinois

J. H. HARLAN CO.
WOODLAND, CAL.
HOLSTEINS

Nothing to sell now, but we are booking orders for calves for future delivery.

Offerings all Sold
REGISTERED HOLSTEINS.

Orders taken for bull calves to be born of A. R. O. dams. Heavy milking strains with high average per cent fat.

LINWOOD FARM,
Santa Cruz, Cal.

Purebred Registered
HOLSTEIN CATTLE
The Greatest Dairy Breed
Send for FREE Illustrated Booklet
Holstein-Friesian Assn., Box 165, Brattleboro, Vt.

Pacific Guernsey Herd

If interested in producers and catalogue of the herd, address

C. S. RASMUSSEN
LOLETA

HUMBOLDT COUNTY CALIFORNIA

SHORTHORNS

20 Head of Service Bulls
For Sale

MILK STRAIN

Attention Dairymen!

I am breeding the finest stock in the West. Young bulls for sale—all pure-breds. Write for prices and pedigrees.

JOHN LYNCH,
Petaluma, Cal.

Holstein-Friesian Cattle

A Few Choice Registered Bulls and
25 Choice Registered Heifers.

Prices on Application.

CHAS. JAY WELCH, Los Banos, Cal.

of proposed rules to govern Advanced Registry. These were adopted and an appropriation was made toward paying the expenses of Advanced Registration.

Mr. Sanders was the only exhibitor at the National Dairy Show last year. He explained that unless the D. B. Cattle Association did its utmost this year, Dutch Belted cattle would be denied classification at said show. He asked the association to devote all it could spare for fair appropriations to this one show, and suggested that the appropriation be divided equally among the various classes. He entreated breeders to exhibit at the National and to make there the biggest and best show of Dutch Belted cattle that has ever been anywhere.

Mr. Kirby, who was a visitor at the National Dairy Show last fall, and knew the feeling of the National Dairy Show Association, was willing to meet the Dutch Belted cattle Association half way, and more if it would guarantee a creditable exhibit.

The association voted to provide \$600 for exhibitors of Dutch Belted cattle at the National Dairy Show, the same to be divided equally among all classes. Appropriations were also made for advertising and for Advanced Registration.

It was voted that the association was opposed to the Government interfering with the association register.

The following officers were elected: President—Dr. H. W. Lance, Peapack, N. J.

Vice-President—Wendel Andreas, W. Englewood, N. J.

Superintendent of Advanced Registration—H. W. Lance, Peapack, N. J.

Secretary-Treasurer—G. G. Gibbs, Markshoro, N. J.

Executive Committee—Northrup Fowler, Whitestone, N. Y.; Chas. A. Davison, 60 Wall street, New York; O. A. Leonard, Tolland, Conn.; E. J. Kirby, Covert, Mich.; L. L. Rasey, DeKalb, N. Y. G. G. GIBBS.

THE SKIM-MILK CALF.

Because of the scarcity and prevailing high price of dairy stock throughout the country, more attention must be paid to the rearing of young heifers with which to replenish the herds. It is not profitable, however, to allow the calf to have all the milk it desires. Not only is milk too expensive as food, but the young calf, if allowed to have all it will drink, will be troubled with digestive disorders. The calf should be weaned as soon as possible and substitutes found to take the place of the whole milk. It should be allowed to stay with its mother for two or three days, as the first milk or

nary tin pail, using the old-fashioned method of placing the fingers in the pail to teach the calf to drink. The pails should be kept absolutely clean, and sanitary methods should be followed, as the germs found in the filth are very conducive to intestinal troubles. Feed the calf twice or three times a day with the whole milk for two and one-half to three weeks, when skim milk may be substituted, making the change gradually, allowing about two weeks to make the change. From eighteen to twenty pounds of skim milk fed warm, may be given to each calf, although each should be given individual attention. Don't make the common mistake of feeding too much milk. Troubles in calf raising result from too much feed rather than too little. Skim milk produces growth for about one-third of what it costs with whole milk.

Skim milk is deficient in fat, so it becomes necessary to furnish some fat producing food. Such feeds as rolled barley, corn meal, bran and rolled oats may be used. The calf may be taught to eat grain in the mouth after it has finished drinking the milk. Don't allow feed to remain in the trough after the calf has finished eating. A little hay, such as alfalfa or clover, may be fed. A dairy calf should not gain over a pound and a quarter a day during the first four months of its life.

E. V. ELLINGTON.

In Charge of Dairy Production, Idaho Experiment Station.

Whole milk is said to be one of the best feeds for hogs suffering with disease of any kind, as it has often been of assistance in bringing hogs through spells of sickness.



Star Youth Korndyke Wayne (68296).



Aaltje Sir Pontiac (77717).

Two Good Holstein-Friesian Bulls Brought From the East by Heenan & Weldon, Sacramento. Aaltje Sir Pontiac Is Now Owned by Markofer & Latta, Elk Grove, Cal.

colostrum fits the digestive tract for future reception of food. About the third day after birth the calf may be separated from its mother and fed from eight to ten pounds of the whole warm milk. This amount should be gradually increased to fourteen or fifteen pounds. It may be fed in an ordi-

Simply because a calf is given her ration of milk each day, it does not signify that she does not need water also.

A purebred bull on the farm will double the value of a scrub or low grade herd of cattle in a very short time.

H. W. Moergeli, formerly Superintendent of the Fern Ridge Guernsey Farm, is now located at Fowler, California, where he has charge of the dairy department for the Kirby Distilling Company. This company plans to establish a purebred Guernsey herd in the near future.



Home of Modesto Creamery, Modesto, Cal.

A PROGRESSIVE INSTITUTION.

After the dairyman has solved the problems of stock, and feeds, and labor, he still has the problem of the sale of his product to consider, and fortunate indeed is the community where there is an institution adequately equipped and managed to allow him the best returns upon the fruits of his labor and thought. In the picture in this issue of the Modesto Creamery, is shown the home of one of the best appointed creameries in the State, and an institution which contributes largely to the success of dairying in the Modesto district. The building itself is of substantial brick construction with pebble dash finish, tile roofing, and equipped with York ammonia compressor and complete modern appliances.

The creamery has a capacity of 1200 pounds of butter daily, and under the same roof has an ice plant with a capacity of 15 tons of pure distilled water ice, daily. The boilers and steam condenser are located in separate buildings outside of the main building.

Mr. Lowell Gum, who manages the Modesto Creamery, has greatly increased the efficiency of the institution by an active and intelligent interest in the general welfare of the dairies which supply the creamery with milk.

Time for Cow to Dry Up.

The time of milk giving is largely influenced by the period of gestation, as usually the cow will be ready to dry up from six to four weeks before calving, no matter how long she has been giving milk.

Origin and Development of Holstein-Friesian Cattle

(By J. W. McAllister, Chino, Cal.)

(Continued from May issue.)

In 1871, realizing the great need in keeping the breed pure and unadulterated from all outside blood, a few of the most progressive importers formed the Association of Breeders of Thoroughbred Holstein Cattle, with Mr. Chenery as president. Up to this time the cattle had been generally known as Dutch, and as a protest for changing the name to Holstein, the Dutch-Friesian Cattle Breeders Association of America was formed with Mr. Whiting as president. The controversy about the name of the breed was finally settled by the two bodies being united into the present Holstein-Friesian Association of America in 1885.

The first public herd book ever published of the breed was by W. W. Chenery in 1872. In 1875 there was a herd book published in Holland on the breed. The Western Holstein-Friesian Association was formed in 1892 and a few years later consolidated with the larger association. In 1891 the Holstein-Friesian Association of Canada was formed.

Solomon Hoxie, while vice-president of the Dutch-Friesian Association, originated the advanced registry. Before this time, individuality had been the chief guide in selecting cattle and realizing that more intrinsic standard should be set, the Dutch-Friesian Association established an advanced registry in which a bull could be entered by an official scale of points, and a cow by a record of milk production. The Holstein-Friesian breeders were not only the first to adopt the system of advanced registry, but have always been the foremost in adopting new standards. Upon the invention of the Babcock tester the Holstein-Friesian Association permitted the publishing of tests made only by the State Agricultural experiment stations under official supervision. From 1894 to the present time this new system of testing has been the greatest aid in advancing and improving the breed in America, and all of the other dairy breeds have been forced to adopt the principles laid down by the Holstein-Friesian Association.

The history of the Holstein-Friesian in America has been one of triumphs and progress over the straight opposition and prejudice. When first introduced in America they were looked upon with great suspicion and dislike, not only by the dairymen but by the public in general. The Jerseys were thought to be the only profitable dairy breed. Every inch of ground gained in America has been stubbornly fought for. The popularity of the smaller breed was so great that it has only been by official records that the Holstein-Friesian has become supreme in the United States as well as Canada. It has only been by the hard actual demonstration of the Babcock tester that the Holstein cow has won her superiority over the smaller breeds in butter production.

The first accurate records ever kept of Holstein cows was by G. S. Miller of Peterboro, N. Y. The records made by his cows, though they seemed almost unbelievable at that early time, went unchallenged because of Mr. Miller's renowned integrity. Dowage was the first cow of any dairy breed to make an authentic record of 12,681 pounds of milk in a year. Dowage's record was soon surpassed, however, by another of Mr. Miller's cows, Crown Princess, who made a world's record of 14,027 pounds of milk in a year.

In 1880 the Holstein cow Aaggie made the wonderful record of 18,004

pounds of milk in a year. This record was so far ahead of what any cow had ever previously done that it was received with great incredulity. For some time there was a great discussion whether any cow could produce that much milk in a year. However, so many Holstein cows have excelled that mark in official testing that a record of 18,000 pounds of milk in a year, though a Jersey has never come up to that mark, it is considered a very ordinary occurrence for a Holstein. Aaggie was also great in her transmitting powers and left her impress upon the breed.

NEW DAIRY SHED AT FAIR GROUNDS.

Exhibitors of dairy cattle at the 1912 California State Fair will be glad to know that room for about seventy-five head will be provided by building a new shed between the horse barns and the sheds which were put up last year. This will be a better building than the ones already up and will be a much needed improvement. In order to overcome the objection which was made last year to leading sensitive dairy cows through the noisiest and most crowded section of the fair grounds in order to reach the judging ring, it has been decided to locate the judging ring somewhere near the grandstand, where the cattle will be led away from the crowds and noise near the main entrance.

B. Latta, of Elk Grove, California, dropped into the Journal office for a friendly chat recently. Mr. Latta and his partner, Mr. Markofer, have started a purebred Holstein establishment, having recently purchased a fine bull and four heifers from Heenan & Weldon of the Pennant Dairy herd at Sacramento, California. Mr. Latta has arrived at the purebred idea after figuring the thing out in cold dollars and cents, and is an enthusiastic Holstein man already. This herd will be a factor in Sacramento Valley purebred circles a little later on.

If a heifer is to make the best dairy cow, she should freshen when she is from 2 years to 30 months old.

"Scrub" Cream Separators as Unprofitable as "Scrub" Cows



This is the good advice one of the big and long experienced Western cream buying concerns gives to its farm separator patrons, being taken from a letter to one of them:

"We believe the DE LAVAL is the best separator made. We feel that anyone wishing to purchase a separator makes a great mistake unless he purchases the best machine on the market. No one can make a success of dairying by continuing to use scrub cows. Neither can he make a success of dairying by using scrub separators."

There couldn't well be a more simple, comprehensive and forceful statement of the whole cream separator proposition than this. It's just plain common sense.

DE LAVAL DAIRY SUPPLY COMPANY

165 Broadway
NEW YORK

101 Drumm Street
SAN FRANCISCO

1016 Western Avenue
SEATTLE

HOLSTEIN BULLS FOR SALE

PENNANT DAIRY

Four Bulls bred in milk and butter lines, ready for service. Are from tested dams and by the best bred sires in the East. Will sell you one at price that dairymen can pay.

Write for extended pedigree and prices.

Live Stock Importers and Breeders of Purebred Holsteins.

HEENAN & WELDON :: P. O. Box 365, Sacramento, Cal.

HOLSTEIN-FRIESIANS

WOODCROFT FARM, PUEBLO, COLORADO.

Offers for sale a 3-year-old son of Pontiac Korndyke, and eight sons, 4 to 16 months, from A. R. O. dams. Also five A. R. O. cows and five yearling heifers bred to him.



Woodland

A. W. MORRIS & SONS

California

Attention Breeders and Dairymen!

Are you in need of a herd sire? We are offering the choicest lot of

Holstein-Friesian Bulls

Ever offered in the State. Several Eastern bulls sired by Korndyke Queen De Kol's Prince, the sire of four daughters that average 39.22 pounds of butter in 7 days, and one with 1050 pounds of butter in one year. Also have a few bull calves by our herd sire, King Segis Pontiac Emperor, who is a grandson of Pontiac Clothilde De Kol 2d, and his dam a full sister of King of the Pontiacs. Will have some cows and heifers for sale later.

DAIRYMEN ATTENTION!

We can supply you with

Ayrshires

Best blood in the West. Bulls, cows, heifers and calves. Our service bulls were sired by Grand Champions. Write for pedigrees and prices.

BROWN & BRANDON,

Petaluma,

California.



A Successful Dairyman and His Separator House

(By Samuel E. Watson.)

In 1903 Mr. Claus Popp, who was then a farm hand, glad to earn \$1.50 a day in the vicinity of Escalon, Cal., (located on the Santa Fe railroad, near the Stanislaus River), was able to come in possession of thirteen acres of land at a cost of \$50 an acre. An irrigation ditch from the Stanislaus waters a strip of land running down the west bank of that stream and very good crops of alfalfa are grown in this deep soil that is between sand and clay in texture. Without water it is compact, so that cellars are dug in it without artificial lining, but with water it melts like sand and is easily cultivated.

In this deep soil Mr. Popp started his alfalfa and with his wife tried to make a living, going out to work in the vicinity, when there was opportunity, finally renting the place and moving to San Francisco to learn carpentering, getting employment there at that trade. Then, in two or three years, they went back to this little home, with a trade to help them along, until in 1909 they were able to add ten acres adjoining, at \$150 an acre. But this had a good stand of alfalfa on it.

In 1907 a grade Jersey cow was bought for \$30. In 1908 a grade Short-horn was added at \$45, and in 1909 two cows of these breeds mixed were bought for \$70, and in 1910 four Jersey heifers at \$51 were added, three of them being very young. From December, 1909, to February, 1910, the four cows averaged an income of over \$50 monthly, which the owner thinks was a good record. His stock now consists of a well bred young Jersey bull, five Jerseys with first calves and three Jersey grade cows.

In January, 1912, seven of these cows, two nearly dry, brought in \$42 for cream. In February eight cows brought in \$52.50. In March seven cows brought in \$53.50; and for the first half of April, \$31.28, five of these being heifers, as stated.

In addition there is an income from poultry. It is estimated that the yield of alfalfa will be about 100 tons, besides the use of seven acres for pasturage.

Mr. Popp has solved the problem of preventing bloat in the stock by turning the cows in half the seven acres

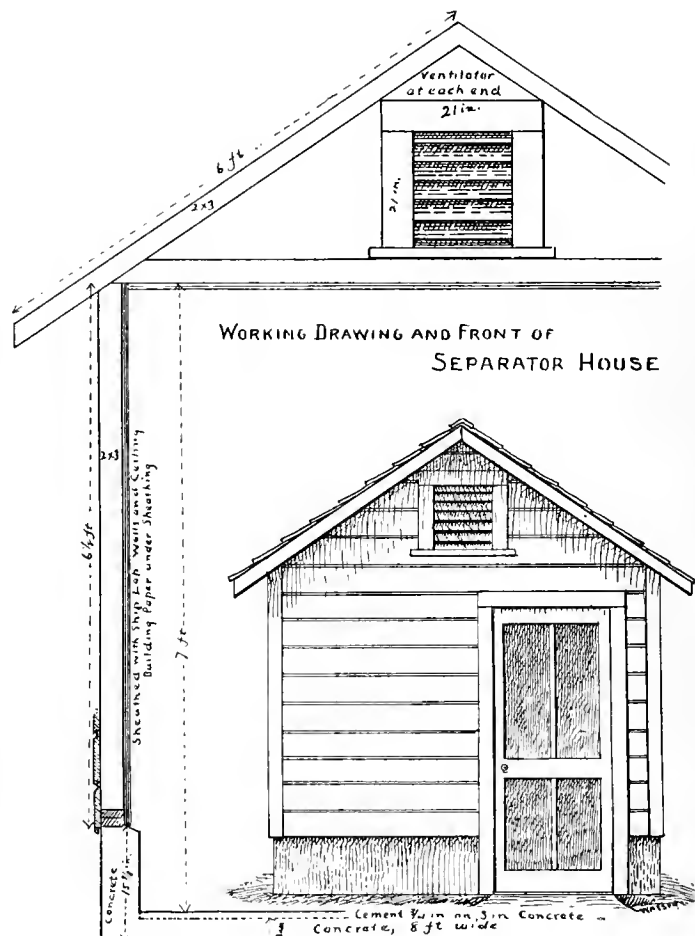
of alfalfa just as it blossoms. This plan also causes the alfalfa to throw out new heads as the plant is eaten down, and by alternating between two fields the damage of close cropping down to the ground is obviated while there is no bloating such as usually results from turning stock into immature alfalfa.

The buildings consist of a good barn, with stanchions and floor of planks, properly guttered on one side, with horse stalls on the other. A modest dwelling, chicken houses and a newly built separator house, here illustrated. Mr. Popp did all the work on these improvements and it has been well done. He finds plenty of work at home now, and no longer needs to hunt it among the neighbors. He finds that eight cows are all that he can handle without hiring help, and with these and the sale of about seventy tons of hay, is making a surplus above a living for his family of himself and wife, a daughter eight years old, and twin boys six years old.

While he has had some help in buying the last nine acres, everything else is the result of his gradual rise from a hired farm laborer, to carpentering, and finally into a successful dairy farmer, with more than half of his life before him in which to enjoy the result.

The plans here, furnished by Mr. Popp, indicate a very substantially built separator house, 8 by 8 feet square on the outside of concrete floor and base. This is covered with white painted rustic and lined inside with smooth walls, stained brown. Under the lining is a thickness of building paper. The windows have hinged glass sash, opening inward, and on the outside are fly screens. Everything is dust-proof and fly-tight, and besides the screened door, with spring, there is a door opening inward.

The specifications and drawings will enable anyone to have such a house put up by capable farm help. The cost of material for this building was about \$35, but Mr. Popp used stuff from the lumber yard at Escalon that he says was considered odds and ends to some extent, which he could personally select to advantage. For the floor sand was available on the farm and he did his own hauling and all of the work.



The following list of material and details of lumber required will permit figures to be secured for a similar building:

Redwood.

- 3 Mudsills, 2x3x8 ft.
- 1 Mudsill, 2x3x6 ft.
- 1 Door stud, 2x3x16 ft.

Pine.

- 8 Studs, 2x3x12 ft.
- 4 Plates, 2x3x8 ft.
- 2 Pieces Bridging, 2x3x10 ft.
- 5 Rafters, 2x3x12 ft.
- 18 Pieces Sheathing, 1x4x10 ft.
- Rustic (1x6), 224 square ft.
- T. and G., 262 square ft.
- 2 Corner boards, 1x5x14 ft.
- 2 Corner boards, 1x4x14 ft.
- 2 Corner boards, 1x4x10 ft.
- 2 Corner boards, 1x4x12 ft.
- Quarter-round, 28 lineal ft.
- Shingles, 1 1/4 M.
- 1 Door, 2-6x6-6.
- 1 Window, 2x1-6.
- 1 Window, 2x4 ft.
- Windows and doors screened.
- Frames for windows and door.
- 4 sacks cement.
- 200 ft. building paper.
- 1 gallon white paint.
- One-half gallon oak stain.

The shelf near separator is designed to lay tinware where the sun will strike it. The other shelf is for other purposes, as occasion requires. The 4x4 pieces under separator are laid flush with rough concrete and above this is cement finish three-quarters of an inch thick, the separator being bolted down while this is barely dry.

The overhead ventilators serve to keep the space over ceiling cool on the hot summer days of the San Joaquin Valley, the ceiling being made close to prevent sand and dust from blowing into the room.

If there is anything in this description incomplete, it is probable that Mr. Popp will gladly reply to an inquiry from any fellow dairymen who desires to build a similar house.

OFFICIAL AYRSHIRE RECORD No. 9

The Live Stock and Dairy Journal— We send you the ninth official report that we have issued during the past year, and it shows a very encouraging improvement in the tests from those of previous years, in the higher average in all classes. In the first years of the testing it was a rare thing to have a cow test over 10,000 pounds of milk, while the nine tests just finished for the past year show for the mature cow an average of over 10,000 pounds for the whole lot, with one exception, and that went over 9,500 pounds.

In the other classes there is the same marked increase in the average. An encouraging feature of the test is that the 10,000-pound cows are not confined to any one herd or any one family, but seem to crop out all along the line, showing that there is a wonderful dairy ability hidden in the Ayrshire cow and that all that is needed is an opportunity to show what the "Perfect Cow" can do when tested officially.

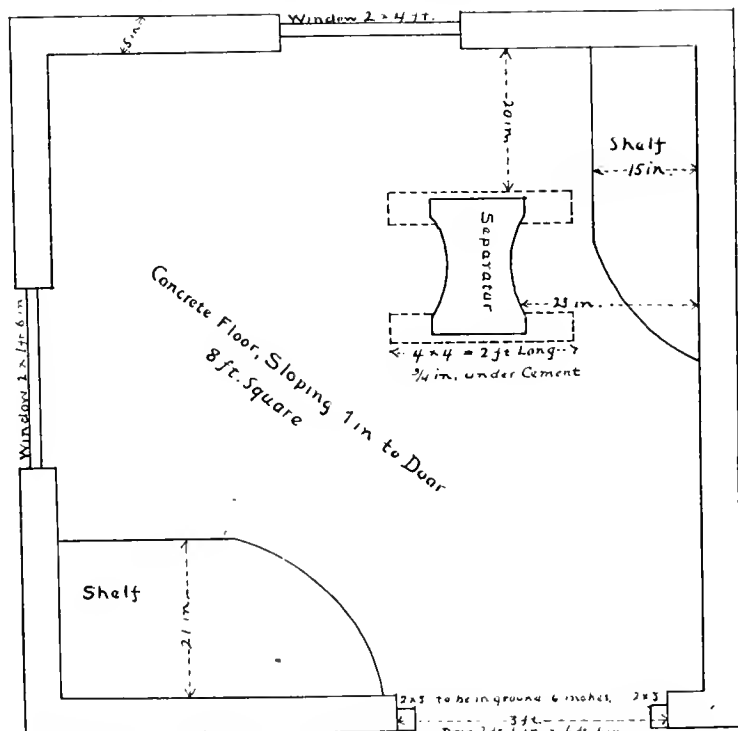
C. M. WINSLOW, Secretary.

Dr. E. J. Weldon has just returned from the East with seventeen bulls and nine heifers, all purebred Holstein-Friesians of rich breeding. These have been added to the Pennant Dairy herd at Diepenbrock ranch.

At the R. E. Haeger sale, Algonquin, Ill., a month's old daughter of King of the Pontiacs sold for \$1800. This young aristocrat was bought by Mr. Davis of New York, who made the trip to Illinois to secure this promising granddaughter of his noted bull.

Some of the Right Kind.

When a man tells you that he has cows that he could milk all the year around if he would, see if you cannot gobble onto some of his stock. Cows that hold out are worth their weight in gold.



Plan of Concrete Floor and Wall Base, Separator House on Popp Ranch.

Three New Queens of the Dairy World

The Live Stock and Dairy Journal—When four years ago Colantha 4th Johanna produced 998.26 pounds of butterfat in a year, the whole dairy world stood amazed at her wonderful record. Her performance seemed so phenomenal that it was regarded as the utmost limit a dairy cow could ever hope to produce. Yet, within the last month, there have been three sisters to complete their yearly work, two of which surpassed Colantha 4th Johanna's record, the whole three averaging 1006.49 pounds for 365 days. This wonderful average cannot fully be appreciated until we state that, of the 4,000 or more cows of the four leading dairy breeds tested for yearly work, Holsteins included, the highest three yearly records, other than those of these sisters, average only 990.97 pounds of butterfat. The three highest records of the smaller dairy breeds average 954.2 pounds of fat, or 52 pounds of fat behind the average of these three sisters. The greatest of these three sisters is Banostine Belle De Kol, the new world's champion cow, as her yearly record far surpasses all others ever made, as explained in the May issue of **The Live Stock and Dairy Journal**. Her records are as follows, at 5 years, 2 months, 22 days.

Length of record.	Milk, pounds.	Butterfat, per cent.	Butterfat, pounds.
7 days.....	672.5	3.67	24.697
30 days.....	2,828.0	3.50	98.987
60 days.....	5,505.0	3.50	194.033
90 days.....	7,856.8	3.61	283.543
7 days*.....	492.1	4.31	21.195
365 days.....	27,404.4	3.86	1,058.340

*This 7-day record was made 8 months after freshening.

Her 90-day record is the largest official record ever made. She raised the 7-day test eight months after calving, 3.678 pounds fat, a gain of almost 20 per cent. In a verification test for this record, in which she was under constant charge of two supervisors, she produced 2.961 pounds fat from 65.4 pounds milk in 24 hours. She raised the former world's yearly record of Pontiac Clothilde De Kol 2d by 41.06 pounds of fat and came within 28.1 pounds of beating Colantha 4th Johanna's milk record. She produced over 100 pounds more fat than the world's champion Guernsey, Spotswood Daisy Pearl, and 105 pounds more fat than the premier Jersey, Jacoba Irene.

It is often stated that Holsteins are given long rests and fatten up so that they might be able to make a good short period test, but as they are not persistent milkers they fall down on long period tests. To refute these baseless and erroneous statements, we could offer no better example than Banostine Belle De Kol. Despite all the assertions of their admirers, there was never a Jersey or Guernsey that has showed such persistency in milking as this great Holstein. Such a persistent milker was she that in spite of all the efforts of her owners, they were unable to dry her off before she began her yearly test. Her best month's work was in the sixth month of her test, when she gave 99.936 pounds of fat, and in her ninth month she produced 88.248 pounds fat. On her 254th day from calving she produced 2.887 pounds of fat from 67.7 pounds of milk. In the last six months of her test, she produced over 500 pounds of fat, or more than a cow of any other dairy breed ever produced in the first six months of their tests. Her per cent fat throughout her test was also wonderful. Eight months after calving her

per cent fat was .61 higher than at the beginning of her test, showing that she was not fattened up before her test. The great persistency and the high per cent fat in the last of their tests, were also especially noticeable in her two sisters.

Banostine Belle De Kol is a large, splendid individual of the breed, weighing about 1,600 pounds. She is an excellent breeder, her year's work not affecting her in the least from breeding with regularity, both she and her two sisters being safe in calf at the end of their tests.

Figuring her butterfat at 30 cents per pound, and her skim milk at 30 cents per hundred weight, her total products would be worth \$383.44. Counting off the price of her feed, which would be about \$200, her net profit would be \$183.44, which is unequaled by any other cow of any breed. If her milk were sold at 10 cents per quart, it



Imported Guernsey Bull, Prince John, at 18 Months of Age. Owned by Bella Vista Stock Ranch, Martinez, Cal.

would average over \$1,300, an income which would support an average family comfortably. A man would but need one cow like her to have a good-sized dairy, for she alone could supply an average-sized milk route of 37 families with enough cream and milk throughout the year. She could be capitalized at \$30,000 and still pay a handsome income on the investment, for one of her bull calves alone would sell for about \$12,000. Her total solids for the year would figure up to about 3,703 pounds. An exceptional young steer might make a gain of 800 pounds in one year, but only about 360 pounds of this would be dry matter, and even of this only a small part would be edible. A Holstein's superiority over a steer is clearly shown when she can produce more dry matter in a year than ten steers, and yet every bit of it would be digestible.

Daisy Grace De Kol.

The most remarkable record ever made outside a mature cow has been completed by Daisy Grace De Kol. Her records are as follows at 4 years, 3 months, 13 days.

	Milk, pounds.	Per cent fat.	Butterfat, pounds.
7 days.....	521.3	4.99	26.000
30 days.....	2,284.6	4.39	100.201
60 days.....	4,804.5	4.06	195.088
90 days.....	7,104.8	3.98	282.573
7 days*.....	355.6	4.61	16.378
365 days.....	21,718.3	4.43	962.795

*Eight months after calving.

Her 7-day record, at the time it was made, was the world's record, but it has since been surpassed. Her 60-day and 90-day records are both world records for junior 4-year-olds. For a year she exceeded the best former record in her class by over 260 pounds of fat and surpassed the highest record ever made under the mature age class by 130 pounds of fat. She surpasses the best record for a year of full age

cows of other dairy breeds by 5.41 pounds of fat. Her per cent fat for a year is extremely high for Holsteins, being 4.43 per cent. Daisy Grace De Kol is also a very handsome cow, combining utility with beauty.

High-Lawn Hartog.

The latest cow to join the Holstein-Friesian group of pacemakers for all dairy breeds is High-Lawn Hartog De Kol. In a list of the five highest yearly records of all dairy breeds, Banostine Belle De Kol, High-Lawn Hartog De Kol and Daisy Grace De Kol hold first, third and fifth places respectively, the second and fourth places also being held by Holsteins, Pontiac Clothilde De Kol 2d and Colantha 4th Johanna. By the addition of her record, Holstein breeders are now able to show ten cows whose average for a year is 938.09 pounds butterfat. High-Lawn Hartog De Kol's records at 5 years, 11 months, 12 days are as follows:

	Milk, pounds.	Per cent fat.	Butterfat, pounds.
7 days.....	603.8	4.10	24.727
30 days.....	2,557.1	3.96	101.145
7 days*.....	468.0	4.15	19.425
365 days.....	25,592.5	3.90	998.340

*Eight months after calving.

Her 7-day test eight months after calving is only second to that of her stable mate, Banostine Belle De Kol, and her yearly record is the third highest ever made.

Each cow received during the test more or less ensilage, and alfalfa, nearly, if not all the time. When



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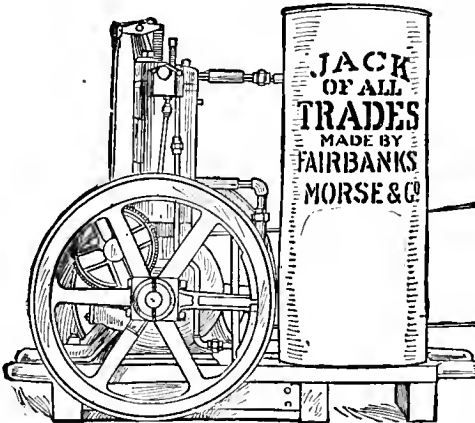
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TRUE BURBANK CACTUS

A single acre will easily carry one thousand tons of feed. The fruit, also, is produced in enormous quantities.

New 26-page Illustrated catalog.

Luther Burbank,

Santa Rosa, Cal.

available they received roots and a mixed grain ration composed mostly of bran and oats, and also some dried beet pulp, green corn with the stalks, green clover and other green feeds, including feed from pasture. The heavier feeds were varied with the conditions of the cows, they receiving near the first of their test about 20 or 25 pounds a day and later only about 8 pounds, the average amount of grain fed being about 12 pounds.

These three great sisters are daughters of that phenomenal sire, Friend Hengerveld De Kol Butter Boy, and they were each bred, raised and developed by Dimmick Bros. of Ohio.

Even if the Holstein world had no other records to boast of, no other claims of superiority to make, the very fact that the only daughters of this bull to make yearly records have each surpassed the best production of any of the other dairy breeds, ought to be enough evidence within itself that Holsteins have no equal as butter producers.

Had these cows not been under serious disadvantages, they would have been able to do even far better in their yearly work. In the first three or four months of their test they were milked by several different parties, which proved to be very detrimental, Banostine Belle De Kol alone losing about 200 pounds in one month through this irregularity. The tests, too, were not begun until spring, with the hot days of summer soon at hand, which came upon them in the flush of their milk.

However, instead of their yearly work being a detriment, it has helped to develop the cows and very likely we will hear of them very soon increasing their former records. Their ten heifer calves are all owned by Mr. Dimmick, and later on we may expect also to hear great things from them.

JAMES McALLISTER,

A number of California State institutions will apply, at the next session of the Legislature, for appropriations for the erection of sanitary dairy barns. The State Engineer and Dr. Charles Keane, State Veterinarian, are working to evolve plans which will admit of the highest degree of practical utility combined with the best sanitary ideas. The materials used in construction will also have close attention as the object toward which they are striving is to build model dairy barns which shall indeed be models. They hope to evolve a type of barn which may be copied in its entirety upon the farms of California, one in which the principal features will meet all the requirements of use and sanitary conditions and where the item of cost will be within the means of the average dairy farmer. When the plan for these barns is finally successfully drawn, it will be a creation of great value to the California dairy farmer.

In remedying the worst defect of the dairy barn on the State Fair grounds at Sacramento, the original specifications have been disregarded, as it was pointed out by many practical dairymen that they were impractical. Some of our readers will remember that in the criticism which the *Journal* made of the construction of this barn, it was shown that while the original specifications called for a distance of 4 feet 10 inches from stanchion to gutter, an error was made and the distance as built was only 4 feet 6 inches. It was pointed out that an average Holstein cow could not stand comfortably in a space of even 4 feet 10 inches, so in correcting the fault the new plan calls for a space of 5 feet 6 inches from stanchion to gutter. This will do away with the most prominent fault of the barn.

A Parallel That is Not a Parallel

(By Charles Hughes.)

In 1849, when the news of the discovery of gold in California was flashed to the far corners of the earth, there ensued a movement of human beings to this Golden State, which was unparalleled in history. Adventurous, hardy spirits were they, who braved the perils of ocean travel, or the equally hazardous wagon trails across the barren plains and frowning mountains.

Of the many who started, only the strong reached the goal, the weaker ones turning back, or in many cases becoming merely a whitening skeleton upon the desert. To the fittest, who survived, came the reward of golden metal, coined into wealth beyond the wildest dreams. With that wealth great cities were built, railroads were driven through the mountains and across the deserts, great estates of land were secured to private ownership, and modern civilization marked another milestone toward the setting sun.

When the placer beds and the ledges had given up that portion of their golden treasure easiest to acquire, the owners of vast fortunes in gold turned to the process of finance to secure more wealth, leaving the mines to be worked by a larger number of men whose per capita wealth was less, and who were to secure the solids of the milk after the cream had been skimmed off. The skimmers of the cream probably huddled better than they knew, for to their cities their railroads brought in thousands of other hardy adventurers whose minds saw visions beyond the digging of gold, and who saw under the sunny skies of the Pacific slope, the possibilities of wealth to be produced from the surface of the earth, in the form of all manner of growing things.

Then began the development of the real California, the California which will sprout, and bud, and bloom long after the last ounce of gold shall have been torn from her bowels. The first stage in the new development of the State was when wheat became king, and the yellowing fields stretched beyond the eye, up and down and across the great interior basin. As continuous cropping depleted the soil, and newer and richer lands in other parts of the world began to produce, many were compelled to turn to other growing crops to secure their living from the earth. Gradually, but surely, vineyards, and orchards, and diversified farming establishments encroached upon King Wheat, crowding him further and further to the north.

Today a new king is reigning—King Alfalfa. Out of the richness of his inheritance from the earth comes the life blood of the greatest industry in California today—the live stock industry, the annual value of which exceeds forty millions of dollars, a sum larger than is derived from any other single industry in the State, and which makes the value of the present annual production of California gold look like the proverbial thirty cents.

All honor to Marshall, who discovered gold in California, and thereby turned loose upon the world the greatest advertisement the State has ever had up to a short time ago. But for lasting results, for advertising that will grow, and grow, and grow, and never dwindle, it has been left to an humble California cow, to uncover an advertisement which will in time have a greater influence upon the future of California, financially, and otherwise, than did the discovery of gold.

When the Holstein-Friesian cow, Riverside Sadie De Kol Burke, recently produced more milk in seven days and in thirty days than any cow in the

world has ever produced before, she focused upon California the eyes of more wealth than tons of advertising literature could have done. Holstein cows are fairly well scattered over the face of the civilized globe, and wherever there are Holstein cows their owners will one day hear that California is the home of the Holstein queen of the world. The next thought will be "Why is California her home?", and the only answer is that it is only because of California environments that she was able to produce a world's record. The chain of investigation, once started, is going to get many a man right down to the heart of things concerning California, and once he has the truth he is going to come to California.

While Riverside Sadie De Kol Burke is undoubtedly a remarkable individual, there is no reason to believe that her record will stand for long in California. Indeed, she herself is more than likely to exceed it, for the conditions under which she made her wonderful production were not ideal by any means, and she probably fell short of her true capacity. Her achievement simply emphasizes in an spectacular way a fact known to every observant California breeder, that any animal reared in a more rigorous climate, when brought to California, develops a size and producing capacity far beyond that which it would have attained in its native surroundings.

This fact has been demonstrated time and again, and the difference in size and evident strength of constitution, is strikingly marked between animals reared in a harsher climate and those of equal age reared in the happy environments of California. That much has already been demonstrated to the point of fact. It seems, therefore, reasonable to assume that in the various breeds of live stock there will be developed in California individuals having greater size, hardier constitutions, and of greater producing capacity. This will no doubt be most noticeably true of the dairy cow, which, in the most complete performance of her functions, is a sensitive organism, responding quickly either to favorable or to adverse conditions. With no torturing days of humid heat in the summer to sap her vitality, and with no icy blasts in winter to make of her body a fat-consuming furnace for several months of the year, it seems also reasonable to assume that it is here that she will eventually attain her greatest producing capacity.

As the desirability of any individual dairy animal is largely determined by the known or recorded milk and butter production of its ancestors, it is by these records that values are fixed, and it is a fact that at the present time the money value of such records lies a considerable distance away from California. This is no discredit to California breeders or to California stock. It is simply a feature of conditions wherein there had been no demand made upon the breeders and their stock for a demonstration of what they could produce, and it was only recently that the trend of the dairy cattle demand in California called for a showdown and found the breeder with a world's record in his hand.

Now, the parallel which is not a parallel, is that, while the discovery of gold, and Riverside Sadie De Kol Burke's dairy cow record, are without doubt the two greatest advertising features of California's history, the parallel ends there. Gold will, no doubt, be produced in this State for a long time to come, but in decreasing quantities and value. But the discovery by a Holstein cow, of the elements

to produce more human food in a given length of time than in any other spot in the world, will be the light which will show the way to production of more and more wealth as the years go by.

A BOUQUET FROM IMPERIAL VALLEY

The *Live Stock and Dairy Journal* impresses us as filling a long-felt want in this field, and we have called the attention of several friends to it. The Dairy Department is filled with many good things.

Wishing you success in your efforts to put us in touch with new ideas, better methods and pure and better blood, we are,

Yours very truly,

WEAVER STOCK FARM.

By J. F. Weaver, Brawley, Cal.

CONDEMNED COWS HAD TUBERCULOSIS.

The following item from the *Irrigator*, published at Patterson, Stanislaus County, will be of interest to many of our readers:

Four of the cows which Deputy Guldager from the State Veterinarian's office condemned as being afflicted with tuberculosis when he tested cattle here recently, were shipped to the Western Meat Company at San Francisco for slaughter under government inspection. O. S. Lokka, one of the owners, went to the city to see the animals slaughtered, as all the cows were fat and looked well, and there was some doubt expressed as to whether the test was a true one. Mr. Lokka returned convinced that the tuberculin test in a good test, for all four animals were found to have tuberculosis, two of them being so badly afflicted that the inspector would not allow their flesh to be used as food. The inspector passed the other two carcasses, and their owners will get pay for them.

Mr. Lokka stated that in the two animals which were the most affected, the presence of the disease could be easily noticed, and that in the other two its effect was found with little trouble.

"I would hardly have believed that these animals had tuberculosis," said Mr. Lokka, "for certainly they looked as healthy as any cows I ever saw. However, after seeing them slaughtered and examined I feel convinced that the tuberculin test is a pretty true test, and hereafter will be willing to abide by its results."

OLD KING ALFALFA.

Here is a Los Angeles real estate dealer's tribute to alfalfa:

Alfalfa beats the bank. It pays bigger interest and never fails. Heat improves it. Cold cannot harm it. The deeper it goes the better it grows. Flood cannot drown it. Fire cannot reach it. Cattle love it. Hogs fatten on it. Poultry thrives on it.

Growing alfalfa means growing independent. It bores like a Kansas chigger and bears like an Australian rabbit. It loves deep soil and hates hardpan. It chokes weeds and eradicates mortgages and wrinkles. Once rooted in good soil with an occasional drink of God's pure water, the days may come and the days may go, but, like Tennyson's book, it goes on forever, handing out the long green and then some.



THE HORSE



Stallion Law is Just, But Apparently Disregarded

The Live Stock and Dairy Journal—As we have a stallion law, why not enforce it? The California Stallion Law has been in effect for a year now, but the Stallion Board of the State has accomplished no good with it. It is a fine and just law, but every old mongrel and blemished stallion is still standing without his license on the bills, so the breeding public does not know to what they are breeding. There are some stallions breeding without a license, and I have not seen one with his license on his bills. There are many stallions today which are registered in stud books not recognized by the Department of Agriculture, and some registered in such stud books are not of pure breeding.

Why not get to work and make good with the California Stallion Law? Kansas found 225 out of 645 registered horses with pedigrees written to suit the importer, and some of them sold as high as \$4,100.00. I wonder what we could find in this State, which for years has been the dumping ground for that kind of horses. Let us go Kansas one better, and when a diseased or blemished stallion is found, publish the name of the importer. This will soon bring them to time. The California Stallion Law was made for the breeder and buyer who does

not know the ins and outs of the stallion game, and I for one would like to see it enforced.
F. S.
Turlock, Cal.

Your letter is sound and sets forth many conditions which exist in California at the present moment. However, let us consider the situation which confronted the Stallion Board and we believe that you will agree with us that they are acting in the manner which will best serve the intent of the Stallion Law. In your letter you state that the law has been in force a year, but if you will look back you will find that it has been in force since last August only, or practically ten months. During that time, as stated elsewhere in this issue of the *Journal*, licenses have been issued by the Board to the owners of 1948 stallions, or an average of nearly 200 per month. When the law first became effective, any great activity by the board would have resulted in wholesale prosecutions and few convictions, and the Board adopted what seems to us the wise policy of giving stallion owners a reasonable amount of time in which to comply with the law voluntarily. As far as the mere fact of registration goes, most of the stallion men of California have already

obeyed the law, and the board has now decided that the time for action on the delinquents has arrived. At a meeting of the Board on May 23d, the whole situation was thoroughly discussed and plans made for immediate action. During the last week of May a competent veterinarian will begin a State-wide tour of inspection, and with the information now in possession of the board he will correct many of the conditions set forth in your letter. Referring to that portion of your letter as to the breeding of stallions, you will note in the Stallion Law that five separate forms of license certificate are issued by the California Stallion Registration Board. The first is for the purebred stallion, the second for grade stallion whose sire or dam is not purebred, the third for crossbred whose sire and dam are purebred but of different breeds, the fourth for non-standard bred, and the fifth for mongrel stallions. As the provisions of the present law do not require that a stallion be purebred in order to receive a license to stand for service, a grade, crossbred, non-standard, or even mongrel stallion may be licensed, but the law requires that he be free from disease and blemish. Your point in regard to stallions standing without license stated on bills, is well taken,

and is a flagrant evasion of the very point which the law is most designed to cover. For instance, you say there are a number of unrecognized stud books in the country. The California Stallion Board does not recognize any of these stud books in issuing licenses and the license to stand as a purebred is issued only to such stallions as are registered in the recognized stud books of the various societies of the country. In making application for license, the owner of a stallion is required to make affidavit as to the book in which his stallion is registered, this is then investigated by the board, and if found correct, license is issued. In case the stud book in which the stallion is registered is one not recognized by the board, then investigation of the animal's breeding is made and either a grade or mongrel license issued, as the findings warrant.

Now up to this point the law has safeguarded the breeder, buyer, and user of stallions, by making provisions which will show the public the exact breeding of the stallion. The present action of the Board in sending out an authorized veterinarian, is for the purpose of determining if the safeguards thrown up by the law are being properly observed. If the investigator finds that they are not, then prosecu-



Home of J. L. Mendenhall, Williams, Colusa County, Cal.

(Cut by courtesy Williams Farmer.)

tions will be speedily begun. It is undoubtedly true, as you state, that the license particulars are not shown on the bills of many stallions now standing, that blemished stallions have been licensed, and that in some cases there has been a misstatement of breeding. While the task of investigating all these features is a big undertaking, the Stallion Board appears to be determined to make a thorough job of it, and we believe that before they have gone very far many undesirable stallions will be barred from service. As owners and veterinarians have made affidavits in the applications for license, the charge of perjury will be prosecuted in instances where there has been willful misrepresentation, and the mere publication of the names of such veterinarians and owners should be enough to have the desired effect. In the case of stallions already licensed, there will be a number of cases which will be investigated closely by the board's veterinarian in spite of the affidavits made in securing the license, and it is more than likely that evidence to warrant prosecutions will be found in a number of instances. Now that the preliminary work of securing the great number of applications for licenses has been looked after, the next step of the Board seems to be a determination to find out from first hand knowledge that the statements upon which the licenses were issued, is accurate, and that both the letter and the spirit of the law are being observed.

Food plays an important part in the growth and development of the colt.

Match horses with reference to size and motion particularly, to color if you can.

When you begin to train a young horse, do it with mingled firmness and goodness.

The Draft Horse and Mechanical Substitutes

The extent to which the demand for draft horses will be curtailed by the development of motor vehicles designed for heavy hauling has been a moot question, but there is sufficient evidence at hand now to justify the assertion that heavy horses will at least hold their own for some time to come.

The Live Stock and Dairy Journal has sufficient first-hand information to convince us that the motor-truck is not going to supplant the draft horse, and this conclusion is strengthened by what we read in Eastern papers. Many big firms in large cities that eagerly adopted the motor-truck have found after several years of experience that they are not as economical or as satisfactory as horses.

It was only a few days ago that we read an item from Philadelphia stating that a large brewing concern that had tried out the auto-truck for its urban delivery service has given an order to replace its discarded equipment with an entire new outfit of horses and wagons.

Large team owners in Boston confirm the statement that for the short haul nothing yet invented can take the place of the horse.

Inquiries in our own city, among the firms that have been using the auto-truck likewise reveals information favorable to the horse.

Replies received in answer to our inquiries contain in substance the same statements as the following extract from a letter from a big brewing company:

"We do not believe that the motor-driven vehicles will entirely supplant the use of draft horses unless their cost is very materially cheapened. Under existing conditions we do not find them economical as against the use of horses for short hauls."

It is said that authorities in the auto-truck business have acknowledged that the auto-truck cannot compete with draft horses save where hauling is exceptionally heavy, of considerable distance or where there is but little delay in loading and unloading.

In other lines of work mechanical substitutes for horses have not proven satisfactory, and big contractors are becoming convinced that they must stick to the horse for carrying on many branches of their work.

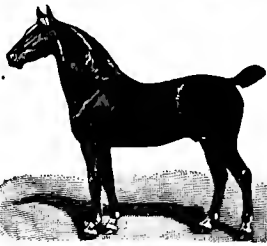
In this connection an item in a New York paper recently told of an order that a big contracting company had placed for 500 big draft horses to be used in the excavation and construction work for a big subway in that city. The company has contracts amounting to many million dollars and after extensive experiments with mechanical substitutes has decided that the draft horse is a necessity. It is planned eventually to have nearly 1,000 teams at work. It might be of interest to note that the horses will be worked in teams, as this hitch has been found to be the most satisfactory. It is estimated that the cost of operating and maintaining a three-horse team and outfit is about \$7.50 per day. There is little depreciation, about 10 per cent per annum being the average.

On the farms of the country the advantages of big, powerful horses are being more and more recognized, especially when they are mares, which, in addition to their labor value, have a productive value that is a big item.

Tractors have taken the places of horses in many instances, but tractors cannot be used to advantage in the orchards and vineyards or on small farms, and the tendency now is toward smaller farms. The scope of work that may be handled by tractors

Warranted to Give Satisfaction.

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A Safe, Speedy and Positive Cure for Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Humen Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

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We have a grand lot of Kentucky Mammoth Jacks and Registered Saddle Horses. The very best of individuals, and royally bred ones—good enough to show any place.

We are prepaying the express on them for the next thirty days.

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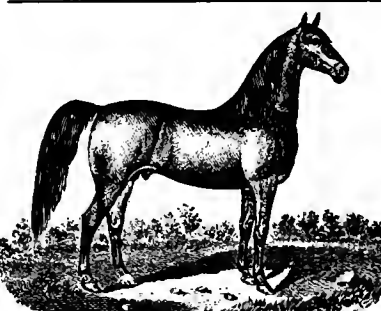
Stallion and three mares. Not akin. Colts from all shown. Price for the bunch, \$4,000.

M. E. Sherman, Fresno, Cal.

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I both buy and sell mules and horses. Have on hand at all times mules to hire in carload lots. Also breed Shetland Ponies, and have several weanling colts and a few well broke ponies for sale.

J. L. MENDENHALL.
WILLIAMS, CAL.



Jack Rogers 4576

Won First Prize at State Fair in 1911 in saddle class, 2 years and under 3, and also won second in combination ring among aged horses. He fills the eye of lovers of good horses. I stand him at the low sum of \$20.

Also Col. Rogers (3287) at the same price.

Their colts will sell at sight to any one wanting a fine saddle colt.

J. T. RAGSDALE

Breeder and Trainer of Five-Gaited Saddle Horses.

MERCED, CALIFORNIA.



Pumping Plant on Ranch of J. L. Mendenhall, Williams, Colusa County, Cal. For Weeks This Pump Has Thrown 1000 Gallons of Water Per Minute, Day and Night, With Only a Fifty-Foot Lift.

(Cut by courtesy Williams Farmer.)

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

is limited, compared with the horse. Automobiles, auto-trucks and other mechanical substitutes have supplanted many horses, but the market for big drafters of desirable type will always remain.

Curtailment of the demand for horses in general has meant a raising of the standard. It has meant the retirement of breeders of inferior stock, but the breeder who produces the desirable kind always finds ready sale at profitable figures.

The auto-truck, the tractor and the draft horse each has its place, and each is most economical in its respective place.

WATER OPENS UP GLOWING PROSPECTS FOR WILLIAMS.

A bright future seems certain to be the destiny of the community surrounding Williams, Colusa County, California, as it has recently been found that an abundance of water can be found at the fifty-foot level. This fact is strikingly demonstrated on the ranch of Mr. J. L. Mendenhall, near Williams. Mr. Mendenhall bored a twelve-inch well and encountered an abundant flow of water at fifty feet. A six-inch centrifugal pump was attached to this well, and for weeks now has been running constantly day and night, throwing at least 1000 gallons of water per minute. This demonstration of the volume of the underground supply is all the more noteworthy because of the dryness of this season when springs in the mountains which have not been dry for years, have ceased to flow.

On the strength of the adequate supply of water which has been discovered, the subdivision of large land holdings is setting in at a rapid pace. Hundreds of acres are being subdivided and planted to alfalfa, fruits, and vegetables, which are all looking fine.

Mr. Mendenhall has a fine forty-acre field of new alfalfa under irrigation and plans to plant about two hundred and sixty acres more. This will furnish feed for the large number of horses and mules which are on the place, and will be juicy picking for the Shetland Pony herd. Besides, we believe that the Mendenhall ranch will be heard about in purebred stock circles a little later on.

The number of stallions registered in California under the new Stallion Law, was 1948 on May 21st. There were, besides, a number of applications to be acted upon. The number of registrations has been very satisfactory, as up to the present time the State has not been compelled to prosecute for violation of the law. Ample time has been given for voluntary registration, and if there are any stallions in the State standing without registration, the matter should not be delayed any longer.

Mr. J. F. Campbell, Pacific Coast Manager for J. Crouch & Sons, Lafayette, Indiana, recently returned from a trip to eastern Oregon, where he sold a carload of registered Percheron, Shire, and German Coach stallions. This is one of the best seasons the firm has had since they have had a branch on the Coast. Mr. Campbell reports a very good trade in eastern Oregon, owing to the increased demand for purebred stallions.

Before starting up a hill with a load, and when the top of the hill is reached, give the team a rest. Let them catch their breath. Undue forcing of horses up a hill with a load frequently causes heart and lung disorders.

THE BOND RANCH.

While on a trip through Alameda County during May, we ran out to Newark, through which place, by the way, runs the connecting railroad to the Dumbarton Bridge, which, in the near future, is destined to be a very important factor in conveying the eastern passenger and freight traffic, much of which is already being diverted to this line. Here we find that capitalists are investing extensively in adjoining lands, and everything points to rapid and substantial development in this section. At Mowry, two miles from Newark, we looked up Mr. Wm. Bond, with whom we became acquainted at the last State Fair, where he was an exhibitor of Percheron horses. At this season of the year we found him busy endeavoring to please his many patrons who had entrusted to him two pastures full of brood mares, all of which we must say were of very satisfactory type, and we do not remember having seen a better lot of colts in one bunch.

Besides these Mr. Bond has five registered Percheron mares. This season all of these have been mated to his imported Percheron, Inquiet, and in due course we expect to see something good of these unions.

On the Bond ranch we also found a herd of registered Shorthorns, consisting of about fifteen head of cows, six junior heifers, and a number of good hulls. The cows are being mated to the roan bull, Perfection (353298), he by Knight Perfection (299,568); dam, Greenwood Mary. The bunch of females includes Greenwood Mary, Greenwood Lassie, Lady Gloster 2d, Dora D. D. 3d, Clover Leaf 4th, Noble Lady, Amelia D. 2d, Humboldt Duchess 6th, and the rest are Frantie cows of the Ashburner strain, all of which would make their mark in a dairy herd, as they are fulfilling their dual purpose, making beef and nursing a bunch of hungry youngsters.

Mr. Bond is looking forward to something extra fine next spring, and well he may, for this registered bull, Perfection, has any amount of deep flesh and is well covered on his back.

From the pastures to the barn yard on the Bond ranch we found all the stock uniformly good, the Bronze turkeys and Brown Leghorn hens showing quality equal to the Percheron mares and Shorthorn cows.

Should Mr. Bond decide to fit some of his young cattle for the fairs this fall, we have a notion that they will be among those present when the blue ribbons are passed around.

Dr. J. P. Iverson, Deputy State Veterinarian of California, recently made a number of inspections of horses affected with glanders at Pescadero, San Mateo County, California, and as a result of his inspection, nine animals were killed.

Wayne Dinsmore, Secretary of the Percheron Society of America, reports that during 1911 there were 192 stallions and 152 mares of that breed imported from the United States into Canada, which was almost 150 more than the number imported from France. He says the Percheron is growing in popularity in Canada, and that many of the above-mentioned importations are American-bred.

Intending exhibitors of live stock at the California State Fair for 1912 should write at once for a copy of the premium list, which is now ready, to Mr. C. Allison Telfer, Secretary State Agricultural Society, Sacramento, California. This applies to old exhibitors as well as new, for the changes made in classifications and prizes make it like a new fair, and will also serve as a valuable guide in the preparation and plans for showing.

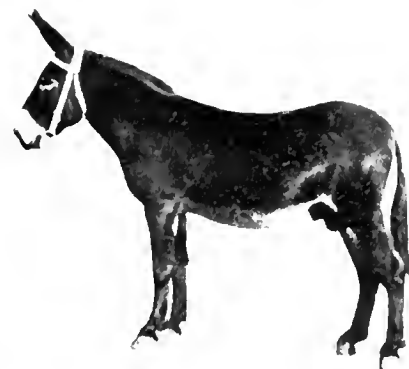
That Carload of

JACKS IS GONE

About September 1st I will be at the Fair Grounds, Stockton, Cal., with two carloads of Jacks and two carloads of Jenneys. This will be unquestionably the best importation of Jacks and Jenneys ever brought to the State.

Write me your wants now, and I will have an individual to suit you.

H. B. THORNBERRY,
Box 679, Stockton, Cal.



THE WORLD'S CHAMPION STUD of PERCHERON HORSES

I received more prizes with 10 Percheron horses bred and shown by me at the World's Fairs at Chicago and St. Louis, than all the other breeders together. I have over 100 stallions for sale at low prices and easy terms. Guaranteed to get 90 per cent with foal.

E. F. KLEINMEYER,
Covina, California.



45 big, heavy-boned dapple gray and black Percheron Stallions.
20 big, sorrel, brown and bay Belgian Stallions.
50 Mammoth Jacks.

My Stallions weigh from a ton to 2400 pounds.

I have the largest number to select from of any importer

My first importation for 1912 arrived February 7th; my second importation February 16th.

I am making a special 30-day sale on fine, big, heavy-boned Mammoth Jacks. Parties wanting Jacks should not miss this opportunity. Write me for special price list of Jacks and for Horse and Jack Catalogues.

W. L. DeCLOW,
Stallion and Jack Importing Farm,

Cedar Rapids, Iowa.

Lafayette Stock Farm

J. CROUCH & SONS., Props.,

LAFAYETTE, INDIANA.

Grand Summary of Prizes Won in 1911

Grand Special Prize Offered by the Societe Hippique Percheronne de France—For best group of five Imported Animals, either sex, any age, at International, Chicago, 1911. Bronze Statue, value 2500 francs, won by five of our imported 3-year-old stallions.



73 First Prize Ribbons.

56 Second Prize Ribbons.

38 Third Prize Ribbons.

18 Fourth Prize Ribbons.

16 Fifth Prize Ribbons.

2 Sixth Prize Ribbons.

2 Reserve Champion Ribbons.

23 Champion Ribbons.

A new importation of good, big-boned, heavy horses, including Percherons, Belgians and Shires, can be seen at our permanent stables at the State Fair Grounds, Sacramento, Cal.

J. F. CAMPBELL, Mgr.,
Phone Park 31. Sacramento, Cal.

Make \$2000⁰⁰ more per Year

Hundreds of farmers right now are making from \$1000.00 to \$2000.00 a year extra money, besides keeping up their farm work, making wells with the

Improved Powers Boring and Drilling Machine

Bores 100 ft. in 10 hours. One man can run it; a team operates it and easily moves it over any road; Bore slate, coal, soapstone—everything except hard rock, and it drills that. No tower or staking—rotates its own drill.



20 years actual service all over the world have proven this the fastest and most convenient well machine made. Easy terms. Write for catalog.

LISLE M'F'G. CO., Box 426 Clarinda, Iowa.

Begin to break the colt early if you would have an easy time with the work and a well-broken horse. A 2-year-old is easier to break than a 4-year-old.

Be sure to have some disinfectant to use on the young colt's naval when he arrives. A half minute at this time may save the colt later.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

THE CALIFORNIA PURE-BRED SIRE LEAGUE

Perhaps the writer has been as closely in touch with California purebred stock and the breeders thereof as any person in the State, yet I must admit that I myself hardly realized the extent of purebred stock interests here until the organization of the California Purebred Sire League revealed the names of many persons heretofore unknown to me as exponents of Better Stock. Especially pleasing it is to note the large number of farmers not following breeding as a business who recognize the value of the purebred sire in the breeding of farm animals. They have learned through reading the farm papers and then by practical experience that it pays to grade up their stock. Once an intelligent farmer notes the improvement that they get of a purebred bull is over the cow that produced it, or finds that the old mare bred to a purebred stallion produces a colt that develops into an animal far superior to herself in every respect, he is not apt to breed his cow or mare to an inferior sire, but will rather go considerably out of his way to find one that has the propensity to stamp his individuality upon his get.

I find, too, that many of the new settlers who have come to the State from the East have previously bred purebred stock, and that they will get back into the game as soon as they are sufficiently settled to do so.

Yet there are hundreds of ordinary farmers in California who go along year after year breeding indiscriminately, ignorant or unmindful of the fact that they are going backward instead of forward. To educate these people to the value of the purebred sire is one of the principle aims of the California Purebred Sire League.

The League is a voluntary, non-incorporated body, and publicity and promotion are the main objects of the organization just now. The purebred sire idea must be kept before the people of the State, literature bearing upon the subject must be distributed and articles must be published in the local papers. To accomplish these

things it is necessary to have the co-operation of purebred stock enthusiasts in every community. The breeders of the State have responded nobly to the call for assistance in promoting the cause of BETTER STOCK, and many of them have already gone among their neighbors and had them sign the pledge cards.

Soon the big campaign will be on

CALIFORNIA NEEDS THE LEAGUE

R. D. McFarland,
Secretary Purebred Sire League.

Will you please send me some of your Pledge Cards. This is something that we need to get started in California. I use only full-blood males, and I have given an order for a pair of the best Percheron mares that my dealer can get in France, to be delivered to me here this summer or early fall. I am interested in good stock of all kinds. The best is the cheapest for me. Yours truly,

J. L. McCRACKEN,
Mendocino County, Cal.

in earnest. Write and tell me what you can do in your community to help the cause, and whether you think your local or your county paper would publish a series of short articles on the value of purebred sires; also write any other suggestions you may wish to make regarding the matter.

The pledge cards have been coming in steadily the past month, and I shall be disappointed, indeed, if the list does not pass the five hundred mark before another issue of the Journal goes to press.

Any person desiring a supply of cards may receive same upon application. A copy of the pledge card is herewith reproduced, and this may be filled out and mailed if you wish to make use of it.

R. D. McFARLAND,
Sacramento, Cal. Secretary.



California Branch National Purebred Sire League

OBJECT: The improvement of the live stock of the State and Nation by the use of Purebred, Registered Sires in place of those of grade, mongrel or scrub breeding.

MEMBERSHIP: All persons who will pledge themselves to the exclusive use of a Purebred Sire by signing the Pledge Card of the League, and who pay the membership fee of one cent.

Pledge: I hereby pledge myself:

- (1) To use none but a Purebred Sire in the breeding of all farm animals.
- (2) To advocate the general use of Purebred Sires.
- (3) To work for the betterment of Purebred Sires in breed-character, individual excellence, soundness and prepotence.
- (4) To discourage the use of grade, mongrel or scrub sires, and all dams, irrespective of breeding, that are diseased, hereditarily unsound or otherwise unfit in conformation and character.

In the presence of a witness I hereto attach my signature to the above Pledge this..... day of..... in the year of 1912.

Witnessed: Signed.....
Address..... R. D.....

MAKE MONEY IN BEANS.

Time That American Farmers Awoke to Neglected Opportunities. Prices Up. \$3 Beans an Early Possibility. Domestic Production Doesn't Meet National Demand. Heavy Importation Every Year.

Beans—Yes, Beans!

It is time that the American farmers woke up to their importance as a profit-bringing special crop.

We used to hear in days gone by, the expression that a farmer's soil was so unproductive that it "wouldn't grow white beans."

In fact beans were more or less despised and passed over by farmers for other crops. But the farmer who has begun to sit up and take notice on the bean question.

Beans are steadily growing in popularity. More people are eating them every year. Food manufacturers are spending literally millions of dollars to educate people to the delicious, wholesome quality of baked beans, as a dish for everyone.

The question right now is whether the farmers of America are going to allow a big proportion of the handsome profit that beans are bringing to go to European importers—or are they going to rightfully claim them as their own.

The answer is: **Grow more beans!** Home beans are invariably preferred.

But every year the domestic production is far short of supplying the home demand. This domestic crop is around 8,000,000 bushels annually. It should be at least 10 to 12,000,000.

The prices have gone up amazingly in recent years. With hand picked beans bringing \$2.60 a bushel, the prospect of \$3.00 beans is exceedingly favorable, pretty fair profit from land that's "only good enough to grow white beans."

That means that your beans will be your most profitable special crop.

It is a mistake to believe that beans can only be grown profitably in the States which are now producing the greater portion of the bean crop—New York, Michigan and California.

Hundreds of thousands of bushels of beans are grown in Maine, Wisconsin, Ohio, Pennsylvania, Iowa—in fact the successful production extends as far south as Florida.

There are also heavy bean-producing sections in Vermont, Illinois, Indiana and Minnesota.

In fact, beans can be grown and matured successfully in all northern latitudes, and many Southern States have demonstrated successful bean-growing soil.

Authorities tell us that any soil that will grow wheat and corn is adapted to the profitable production of beans.

Experiments have proved that beans yield better on old land than on new.

An inverted clover soil is ideal for beans.

A common rotation for large bean-growing sections is clover, beans, wheat.

Bean experts recommend deep plowing—not less than 6 inches—to prepare the soil for beans. As to planting time, it is a wise rule to wait till the soil is thoroughly warmed; cold ground is death to the success of a good bean.

The planting time recommended by the most successful bean growers of New York and Michigan is between June 5th and June 20th. This time, of course, depends entirely upon geographical location and the condition of the ground.

We feel justified in advising the farmer who wants a sure, and top-price-bringing crop to think seriously about beans. The consumption is increasing all the time—the prices going up!

INCREASED PRIZE MONEY FOR LIVE STOCK.

At a meeting of the Board of Directors of California State Agricultural Society, May 21st, it was decided to expend the sum of \$30,000.00 on special attractions and publicity for the 1912 California State Fair. This sum exceeds by at least \$10,000.00 the sum expended for similar purposes last year. In addition to this there have been many substantial increases in the amount of prize money all through the premium list, and a considerable number of National breed association and clubs have this year for the first time made provision for special prizes at the California State Fair.

There is a greater interest among prospective exhibitors at this time than has been shown in any previous year, and the 1912 Fair will be the greatest in the history of the State.

All classes of live stock have fared especially well in the prize money increases, and with better facilities for caring for stock on the fair grounds, and with the great number of purebreds which have been brought to California within the past year, the live stock show this year will be the greatest ever seen in California.

The selection of judges has also received careful consideration by the Directors and the names of the men finally decided upon is enough to assure live stock exhibitors of competent judgment. Mr. N. H. Gentry will judge beef cattle and swine, Prof. Carlyle horses and dairy cattle, and the sheep will be judged by J. I. Thompson of the State Farm and Mr. Cook of Hayward.

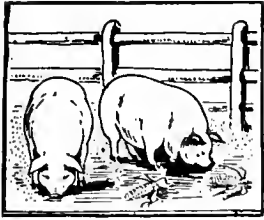
The premium list is now ready for distribution and a copy may be had by addressing C. Allison Telfer, Secretary State Agricultural Society, Sacramento, California.

BETTER INDUCEMENTS FOR SADDLE HORSE EXHIBITS.

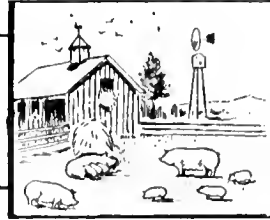
The Journal is particularly gratified to learn that the Saddle Horse breeders of the State have come in for substantial recognition in the prize lists of the California State Fair, by the increase of prize money in the various classes. Last year the saddle horse breeders provided one of the most interesting exhibits on the California fair circuit, and the value of their animals, with the attendant danger of losses in transport or on account of changes in climate and surroundings, made the small money prizes offered a very small incentive to the breeding and exhibition of fine saddle horses. While on the saddle horse subject, the fair grounds at Fresno, California, have one of the best features for the exhibition of saddlers that we have seen in the State. Directly in front of the grandstand is a big, roomy paddock where saddle horses are shown and judged between heats of the races. The enclosure is large enough to accommodate the classes requiring driving to rig, and with a bunch of stylish saddlers in the ring there is none of that uneasiness on the part of the grand stand audience which sometimes occurs during a long wait between heats of races. This Fresno idea is worth investigating by other fair managements who may have grandstand improvements in mind.

It is wise to treat a horse well. Men who are well treated are generally happier and better able to do good work than men who are ill treated. It is the same in the case of horses. It will pay you to treat your horse well.

The reason why you feel pain in your body when you are hurt is because you have nerves. Horses have nerves and feel pain as well as you. Think of that, and do not make your horse suffer.



THE SWINE HERD



Developing the Swine Herd

Various Breeders Express Their Ideas on Important Subject

The Live Stock and Dairy Journal— My attempting to write an article on developing young pigs seems very presumptuous to me, when there are so many men so much better qualified than I am to do so. However, there are many more beginners than there are old breeders and it does us all good to exchange ideas.

The most important time in a pig's life is while it is with its mother. When a sow is due to farrow give her an individual pen and house. If you have never done this, try it once and you will continue doing so. If you have several sows with pigs running together, the oldest pigs rob the younger ones, and as a result they wax big and fat while the younger ones either get stunted or die.

When you have your sow in a sep-

end of the year you have a pot-bellied hog weighing about 150 pounds; or you can feed your pigs while on pasture a little concentrate, grain, dried fruit, etc., and you have a smooth bunch of hogs weighing about 250 pounds.

In raising hogs too much stress cannot be laid on the importance of having a purebred sire for your pigs. Every breeder has his own favorite breed and each breed has its own distinct advantages. Whatever breed you choose, stick to it. The best of sires cannot prevent you from raising scrubs if you change the breed of your sire every year or so.

EDOUART BRYANT.

Kings County.

The Live Stock and Dairy Journal— In making a foundation for a swine herd, the safest and surest thing for success is to select your foundation

weather during the day to get plenty of exercise. I find California a good place for my Poland Chinas. There is the dust to contend with, but a good climate and an ideal home for the hog. But these things are not all, young breeders. If you would obtain the greatest success, you must give the best of attention to your stock or another will have better pigs and get more cash than you do.

It is best to grow one's own feed if possible. Alfalfa is one of the greatest essentials here, and especially for the brood sow and growing stock. One of the greatest sources of profit in hog raising, as in all lines of stock raising, is to keep posted on your business. Watch those who succeed, get the best authority, the best blood, and handle just what stock you are prepared to handle in an economical way, and no more.

It is a true saying that the hog is a mortgage lifter, but it pays to get good results by getting each pig into cash as quickly as possible.

S. F. WILLIAMS.

Butte County, Cal.

The Live Stock and Dairy Journal—

On our ranch in Kern County we run in the neighborhood of 300 hogs (Poland Chinas). We have found that it pays to give the brood sow and her young, good, warm, sheltered places. After birth we keep the young in the brood pen from four to six weeks, feeding the sow during this time on dry alfalfa, buttermilk with shorts, with plenty of water. The pigs are then taken away from the brood sow and let run on alfalfa pasture, being fed, in addition, buttermilk mixed with shorts for about three weeks longer. From that time on they are turned on the alfalfa with light grain rations. We have been fairly successful for beginners, but find that eternal vigilance is the price of success.

PERKINS BROS.

By W. W. Perkins.

Orange County, Cal.

PURCHASED BERKSHIRE HERD.

The Live Stock and Dairy Journal—

Having bought the entire herd of Berkshires formerly owned by Locust Grove Farm, Ripon, California, including Kennett 106045 and forty other fine individuals, among which are some of the biggest and best brood sows in California, we will continue to breed for size, quality, and other features which go to produce the best Berkshires. We have been breeding Berkshires for a good many years, so we will be able to send out as good hogs as any breeder can. In adding new blood to our herd, we always select sires that are noted through their ancestors to be able to transmit size, quality and quick maturity to their offspring.

We will also fill all orders Locust Grove Farm had hooked for delivery. If any orders are not filled by Locust Grove Farm at the dates promised, let *Journal* readers write us at once, so that none may be overlooked, as we bought this herd agreeing to deliver all orders already booked.

CALLA GROVE FARM.

Ripon, Cal.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

300

**Purebred
Berkshires
Duroc - Jerseys
Tamworths
at**

Swineland

We are offering high class Boars, ready for service, and Spring Pigs of both sexes, for immediate shipment.

All stock sold on a money-back guarantee

Swineland

Box 161. YUBA CITY, CAL.

O. I. C.

THE BIG WHITE HOG.

Two hundred and fifty to 300 pounds at 8 months. Best and largest herd in the State.

Write us your wants. We can fill them. All our stock is registered.

**STUDARUS & CUNNINGHAM
MILLS, CAL.**

RED DUROC HOGS

Best Bred Stock Now in California

YOUNG STOCK AND SERVICE BOARS AND SOWS FOR SALE

All registered pure-breds, and from such sires as Wonder and Klondike. New Importations from Missouri and Indiana. We are located in the Imperial Valley, and are here to supply California, Oregon and Arizona breeders. Write for prices and pedigrees to

MOORE BROS.,

Box 202, El Centro, Imperial Co., Cal.



Premier's Jenette 4th (123131). Owned by Calla Grove Farm, Ripon, Cal.

arate pen with a nice litter of pigs, a not too rich slop. Skim milk is valuable at this time.

When the pigs are a month old they are ready to eat, so a place should be made inaccessible to the sow, where feed. This should consist of a variety of feeds, including grass, alfalfa or pumpkins. The sow's feed should be feed lightly for a few days and then gradually increase until when the pigs are a month old the sow is on full the pigs can eat at any time. The feed of the pigs while nursing should be substantially the same as that of the sow.

I prefer to wean the pigs at about eight weeks. Ordinarily you can dry the sow pretty well by discontinuing the slop and feeding grain and water. At this stage, for profitable pork raising, pasture is indispensable. Alfalfa is the best pasture, but do not depend on alfalfa alone. You can make your pigs live on pasture alone, but at the

stock from a good breed and from a good strain of the breed. Stick to the good strain, selecting the best males you can get when you make a change. If you see your cross is not a success, fit them all for market and begin anew for your breeding stock.

Make a point to get your pigs large and strong, ready to show for a breeder or for a feeder. They will pay better every time than an empty hogskin that is continually running over your fields squealing for something to eat or rooting up your crops, perhaps out on your neighbor's with his dog after him.

I have some trouble as all breeders may, in keeping by pigs healthy. They get sneezy, cough, get scours, if I don't keep right after them and keep them clean and change feed and bedding. I find it quite necessary to provide the young pigs with good sleeping quarters, free from wet or dusty bedding, and to put them outside in good



FOUR OAKS STOCK COMPANY

Woodland, California



BREEDERS OF BERKSHIRE, HAMPSHIRE AND
POLAND CHINA HOGS.

Their breeding is as good as it is possible to obtain. Since selling our herd boar, Double Premier (88215) to Mr. A. B. Humphrey of Mayhews, Cal., and Kennet (106045) to Mrs. C. E. Byrus of Woodland, we have put at the head of our herd Ravenwood Longfellow 10th (136430), assisted by Holt's Longfellow, a son of Double Premier (88215). We also have a Double Black Robinhood boar to breed our twenty head of Double Premier gilts to for spring farrow. A few of our mature sows are Ravenwood Duchess 92d (140527), Trixie M. (120796), Star 3d (120795), Royal Lady 10th (121407), Berrys' Eclipse (151956) whose sire sold for \$1000 this fall; Belle Wilts 14th (113497), Lady Premier 3d (106046) and Woodland Lady Premier (144095)—the best one we ever raised; sired by Kennett (106045).

Correspondence promptly answered. Our prices are reasonable for quality of stock.

DUROC JERSEYS AT MODESTO

BOARS, SOWS AND YOUNG STOCK FOR SALE.

Registered Duroc Jerseys. No better anywhere. Write for prices. Have stock for immediate delivery. Address:

JOHN P. DAGGS

BOX 5 R. F. D. 5 (One Mile North of Town), MODESTO, CAL.

Ten Top Notch

Duroc Jersey Pigs

I have ten fine pigs, farrowed April 28th, from Peoria Bell (282308, first prize winning 13 months old sow at State Fair of 1911. Peoria Bell is sired by Victor I, champion boar of the Pacific Coast, and her dam was Lady Isabel, champion sow. The pigs are sired by Golden Duke (38987). These pigs are all top-notchers, and are for sale at right prices.

J. A. CONNER, Santa Clara, Cal.

REGISTERED

POLAND CHINA SWINE

PRIZE WINNERS

Finest Stock in the State from \$30 up

M. BASSETT, Breeder

HANFORD, CAL.

SUNNY SIDE STOCK FARM BERKSHIRES

Young Stock from Blue Ribbon Winners For Sale

G. A. MURPHY

PERKINS, CAL.

Quality Berkshires

Oak Grove Berkshires are the large, growthy, vigorous, money-making type. They carry the blood of Masterpiece, Black Robinhood, Silver Tips, Premier Longfellow and Empress, names that mean quality wherever Berkshires are bred.

We are able to quote you the best Berkshires at the cheapest prices.

Further information cheerfully given.

Oak Grove Dairy Farm, Woodland, Cal.

THE MULEFOOT HOG.

(By John H. Dunlap.)

Aristotle, who was born in 384 B. C., wrote of a race of hogs with undivided toes or consolidated hoofs. Later Linnaeus, the Swedish naturalist, born in 1707, wrote that hogs with undivided toes were not uncommon about his native town in Sweden. This hog has been known to naturalists in different parts of the world for more than 2,000 years. At the present time these hogs are said to be found in Sweden, Holland, Scotland, Norway and Turkey, and they have been found in different parts of the world for centuries.

The sows have large litters and usually raise them. Although I personally prefer not more than ten pigs to a litter, large litters are to be preferred to litters of two or five, which seem to be the number that sows of some breeds farrow.

While they seem to be the same as any ordinary hog except for their feet, I find that their intestines are smaller and this makes them kill out a larger percentage of meat. The liver also seems to be different from the ordinary hog. Soldiers of the Civil War

crossed with other breeds, is still puzzling the experts.

This breed gets its name from its solid foot, which is solid like that of a horse or mule. The flesh is of a remarkably fine flavor. President Taft was sent a dressed Mulefoot pig for Xmas a few years since and praised it highly. People who are not informed sometimes think the meat of this breed is not as palatable as other breeds, but all with whom I have talked personally tell me that it is the best flavored and tenderest they ever ate.

I have made a great many experiments with hogs and am now conducting hog breeding experiments, with the help of Mr. Spillman of the U. S. Department of Agriculture. But the Mulefoot, in the different tests I have made by cross breeding, keeps its solid foot in nearly every case.

They are a great boon to farmers in districts where they have trouble with their hogs mixing with their neighbors' hogs, since the Mulefoot is easy to tell from any other breed on account of their solid feet. For this reason I advise breeders not to sell to any of their immediate neighbors if possible. This one point is worth hundreds of dollars in case of disputes about hogs



Good Type of Mulefoot. Owned by John H. Dunlap, Williamsport, Ohio.

tell that they saw these hogs in several of the Southern States at that time and that they found them hard to capture, but that the meat was fine.

The full blooded Mulefoot hogs are as large as any of the other breeds when they have the same care. The only thing that will keep their size down is breeding too young. A great many new and inexperienced breeders get a pair of these pigs and breed them too young, and after they get started with them inbreed them to the detriment of their whole herd. Prospective buyers of this improved breed should be careful to buy of experienced breeders who have more than one boar in their herd and who can give proof positive that they do not inbreed.

The American Mulefoot Hog Record Association, with headquarters in Columbus, Ohio, was organized to protect the buyers of these hogs as well as to assist its members who are trying in an honorable way to build up this great breed. All hogs of pure breeding can be recorded with this association that is backed by some of the oldest and most reputable of breeders.

My attention was first called to this breed by a letter from Mr. Quinn, of the U. S. Department of Agriculture. It seems that the government has never been able to find out where or how this breed got its solid foot. There are a great many ideas held about its origin, but this, as well as the tendency of the purebred Mulefoot to assert itself with a solid foot when

when they get mixed. Since there are so few herds in the country it prevents anyone driving off your hogs if you have this breed. A great many suppose that they come from the wild hog, but I find them very gentle and easy to handle.

Claims are made by breeders of the purebred Mulefoot hogs, that compared with other breeds they are hardier, have greater vitality, mature earlier and cost less to make the first 250 pounds. The sows are gentle, kind mothers, and are usually very prolific, raising large litters of pigs, which if turned out, will hustle for their living, or will grow and thrive, paying big returns under good care and attention. They claim the pigs are harder and more free from pig diseases than pigs of other breeds, are great rovers, hustling for themselves from the time of birth, and will usually demand a premium on the market.

There is a wonderful demand for them and this leads some breeders to breed their gilts too young. One of the larger boars of the breed weighed 970 pounds and I have several that would weigh 1,000 pounds if properly fed to put on weight.

A runty pig is more the result of neglect by its owner than of breed or birth.

Regular, systematic feeding should be practiced with hogs just the same as with any other live stock.

A Breeder's Experience with Hog Cholera and the Serum Treatment

The Live Stock and Dairy Journal—I will write you something of my recent experience with hog cholera and serum treatment, believing that many of your readers will be interested in reading the same.

I used the serum treatment on February 6th, and a farmer living across the road from me used it the same day. After about six weeks the cholera broke out in his herd, nearly the entire herd being taken sick at the same time. About fifteen head had been inoculated, while the remaining thirty-five head had not been given the serum treatment. I was working on this place at the time and had the care of these hogs.

The disease ran its course, stopping after about three weeks, at the end of which time there were living six hogs that had been inoculated and three hogs that had not been inoculated.

All of the hogs on the place were sick except one that had not been inoculated with serum.

Some of those that died seemed to be affected mostly in the intestines, while others seemed to be affected more in the lungs. The ones affected in the intestines died very slowly, being sick from one to three weeks. They passed almost pure blood for some time and the intestines were racked with blood at the time of death. Those affected in the lungs died in from a few hours to two or three days, always with a very free discharge of blood from the nose.

I cared for these hogs, fed them, killed sick ones, hauled out dead ones and burned them, and was back and forth between that place and mine not less than six times a day, feeding and caring for my own herd all this time. Not one of my hogs have shown any symptoms of cholera.

I had put in a dipping tank ten feet long by twenty-six inches wide by thirty-six inches deep, inside measurements, and dipped my hogs two times a week with a one per cent solution of kresol. There are several good dips on the market; use the one that is the easiest to obtain. I cleaned my pens two times each week, sprinkled them with the dip and burned all bedding from the pens, and sprinkled dip freely about the pens. I did not disinfect or change clothes, and used the wagon in which I hauled the dead hogs to the crematory to haul feed to my hogs.

I will always believe that my hogs were nearly as much exposed as though they had been in the same enclosure, except that they did not walk on the same ground, and I believe that I saved my herd by dipping and by good care, and not by using the serum. I would not use it again unless in direct contact with the disease, as I

do not think it affords immunity long enough to warrant the expense.

The sows that had cholera and farrowed gave birth to dead pigs. Whether this was due to the serum or the disease I cannot say, but a sow of mine that was treated with serum farrowed eleven live pigs, so I presume the cholera was responsible for the dead pigs in the instance noted.

Some advise the use of the simultaneous method of serum inoculation, while others say it is as fatal as the disease. I have never seen that method used.

I have fed a great deal of that government formula for prevention of hog cholera, that your valuable paper recommended some time ago, and I think it is a good tonic. I feed salt, copperas, charcoal and sulphur by mixing it where the hogs can get at it. I let them run in a small lot sown to barley, and when that is eaten off, put them in another lot.

If you see fit to use this letter, you may do so, but I wish it understood that I have not written it in a spirit of knocking the university or its product. We had an expert veterinarian use the serum and it did not save this herd, which was not dipped in a tank, but on which dip was used very freely by means of a sprinkling can, while I used a dipping tank and with good care saved my herd.

Wishing your valuable paper much success,
SWINE BREEDER.

[Editor's Note—The name of the writer of the above letter is withheld by request. We wish to take advantage of this opportunity to say that our readers may give us some very interesting and valuable information by writing and telling us of their unpleasant experiences and of their failures as well as of their successes. In such instances, the name of the writer does not need to be published, so long as the name is signed as an evidence of good faith. It is through our mistakes and failures that we learn to be successful, so let's give each other the full benefit of our experiences.]

The Weaver Stock Farm is among the new advertisers in this issue of the Journal. This farm has a fine herd of hogs and has on hand a lot of stuff ready to move. The manager reports that the herd is in splendid condition and free of all disease. The Weaver Farm is situated at Brawley, Imperial County. Their offerings should appeal especially to our subscribers in the lower portion of California and in Arizona.

You cannot reasonably expect a hog to do his best on a single grain ration, any more than you would expect a horse to keep in good flesh and do the maximum amount of work if fed on hay alone.



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They are large in size and of good quality. They are daughters and grand-daughters of Premier Longfellow, Masterpiece, Baron Duke 50th, Rivals Champion, Mayhews Premier and other good boars, and they are in service to a son of Premier Longfellow, two sons of Masterpiece and a good son of Berryton Duke, Jr.

We also have some young Boars and late Spring Pigs for sale. Prices on bred sows, from \$35 to \$60.

Come and get your pick, or write for description and prices.

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Pigs In Alfalfa (Better Than Clover) on Ranch of L. B. Spencer, Colusa County, Cal.

L. B. Spencer, who was an experienced farmer before he came to the Sacramento Valley, has followed the methods of the stock growers of the Middle West on his land in Colusa County, California, with greater success than on his former place near Sioux City, Iowa. Mr. Spencer has two tracts, one of 13.35 acres being just north of Princeton, California, and the other of 69 acres being immediately south of the town. Almost all of his returns have come from the sale of hogs.

Most of Mr. Spencer's sales of hogs have been made to the trading boat, a long established institution that is peculiar to the Sacramento River. The trading boat is a traveling department store that reverses the usual order of things by going to its customers. It consists of a large steamboat which carries a surprisingly large, well kept stock and is a market where goods can be either sold or exchanged for merchandise, groceries, etc.

The trading boat visits every point throughout the river front of Glenn and Colusa Counties every two weeks. Boats of this sort have been running for many years. It is said that the ranchers can sell to the trading boat anything they can raise and that the boat carries in stock every article of merchandise that might be wanted. Trade is lively when the boat comes along, for articles sold at one point on the river are bought at another. The start is made with a big load of merchandise, and before it is finished there is a large amount of produce that is bound for the large markets. With the growth of the railroad systems and with the general improvement of conditions in the stores of the various towns, it is likely that the trading boat will make its last trip before many years, as it is a relic of the days when farms were big and settlements in the valley few and far between. The valley is now being settled up, but as long as there was mostly a floating population, the floating store was best adapted to conditions.

On the lot north of Princeton, purchased by Mr. Spencer in 1906, five acres were planted to English walnuts and peaches. While waiting for the trees to mature, Mr. Spencer leased the place to some Japanese, who are gardening between the trees. The gardening evidently brings good returns, and there is considerable fruit, but neither Mr. Spencer nor any one else can find out the exact amount

of the profits, for the Japanese smilingly evade every effort to make them disclose what the place yields. The owner would like to know what his land will produce, but he has given up trying to obtain any definite information. His rental, however, is satisfactory, and he has to be content with that.

On the land south of town, Mr. Spencer has been raising hogs, but is now preparing to lease that tract, too. This land is all in alfalfa, with the exception of two acres, set out to oranges and other fruits, grapes and berries. There is a barn, but no home has been built, as the owner has been living in town. He is now planning to put up a suitable house.

"Mr. T. C. Southam, whose place is not far from mine, was a neighbor of mine back in Iowa," said Mr. Spencer while discussing his experience, "and we came out here together early in 1904 looking for a place where farming land was cheaper and conditions more favorable than they were back in Iowa. Both of us had farmed for many years. We liked the soil and the climate of the Sacramento Valley and felt certain that land values were sure to advance. Our judgment has proved correct, for the land in our vicinity is becoming more valuable every year.

"I bought my larger place in 1904 and the smaller one in 1906. In Iowa I farmed and fed cattle and kept on along similar lines after reaching California, giving most of my attention to hogs. At the start I bought a few hogs and since then have sold from 400 to 600 every year, both light and heavy. The weights run from 160 pounds up, being mostly in the neighborhood of 200 pounds. These animals have been sold for from \$5 to \$8.40 a hundred pounds, but it has been very seldom that the price has dropped below \$6. It is easy to see that the profits are good, but I do not care to give the figures any closer.

"I have bought some feed, and some times have rented land on which to raise grain. The hogs have been pastured on my own land. In summer alfalfa will graze ten to twelve hogs to the acre. In winter it is necessary to give a little extra feed, but the winters are not long. At such times I feed alfalfa hay, beets and pumpkins.

"I do not feed grain steadily. The pigs are given some grain when little, and more when fattening time comes; but their growth is gained on green alfalfa. The sows have two litters of pigs every year and hogs multiply fast at that rate. There is nothing like it on the farm for multiplying stock and making money, if one attends to busi-

ness. But if anyone wants to win out with hogs, he must watch them all the time and keep them in good condition. They must be cared for continually, but this is true of all branches of farming, for nothing can be raised without some care for details.

"Hogs can be raised cheaper in the Sacramento Valley than in Iowa. This I have found out by practical experience. Climatic conditions are more favorable here and the season during which there is green food for pasturage is much longer. There is a good market here for pork.

"This is a great country for all kinds of live stock. A good brood sow will produce on an average twelve pigs every year, and more if well cared for. These pigs can be carried along at small cost if one has a dairy. By grazing and feeding skimmed milk the pigs easily weigh 100 pounds at seven or eight months. This is not an extremely heavy weight, but it is a cheap way to make pork and there are big profits here raising hogs in that way. It would not be difficult to raise hogs that would be much heavier, for they take on weight here at a great rate, but the pork would cost more by the pound.

"I consider this the best dairy country I have ever seen. There are a great number of dairy herds here now, but there ought to be many more. I expect there will be many creameries started in the valley before many years, in addition to those already here.

"Glenn and Colusa Counties contain as good a fruit belt as there is in the State of California. I have traveled considerably through different parts of the State and have seen all sorts of fruit doing well. Even apples do well in the orchards here that are meant for home use; and all other kinds of fruits do remarkably well. On my small tract I have had peaches from two-year-old trees. The two-year-old trees are large and strong and I expect quite a crop of peaches next season.

"My walnut trees are six years old and are producing quite a crop of nuts. That is as near as I can come to giving the returns from them, as the crop goes to the Japanese lessees. All of my trees are growing finely.

"Planting an orchard here is a good way to make money, especially if one can figure out a way to have the land carry itself while the trees are maturing. The profits are large when the place is ready to bear and the investment is safe. Fine oranges can be raised in this vicinity and that industry ought to be developed here. Lem-

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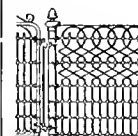
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Champion herd of California, and champion 6 months boar of Oregon heads my herd of gilts from which I expect great results. Young stock, both sexes, for sale at right prices. Booking orders for February pigs.

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Farm 2 miles west of Santa Rosa on the Electric Railroad. Fare, 5 cts.

ons grow well here, too. We have enough citrus trees here that are now in bearing to prove that one is not taking chances in planting oranges and lemons. This locality is ideal for prunes, peaches, pears, figs, olives and other fruits.

"The new railroad that is to be built through Colusa and on north on the west bank of the river will develop this locality and will advance the values of land, as well as improve and broaden our markets. Iowa is a fine country, but I have found a better one, and now that I know California, I would not want to live back in my old home in the Middle West, particularly in winter. This is a pleasanter place to live and is a good place to make money."

TWO MORE GOOD BULLETINS.

The Agricultural Experiment Station, Columbia, Missouri has just issued two excellent bulletins and one circular.

Circular No. 55 on Forage Crops for Swine summarizes the results of experiments reported in Bulletin 95, in response to the many requests received for the bulletin after the issue had been completely exhausted. Bulletin No. 100 entitled "Influence of Fatness of Cow at Parturition on Per Cent of Fat in Milk," contains the results of a number of instructive experiments, the results being presented in a series of nine tables with full description of the conditions under which the experiments were conducted. The conclusions reached are that:

"The per cent of fat in milk can be influenced to a marked extent for the first twenty to thirty days by the fatness of the animal at parturition. This influence appears to extend in some cases in a less degree for at least three months.

Underfeeding of the animal after parturition seems to be a necessary condition to bring about this abnormal per cent in the milk.

"Tests of dairy cows made for short intervals in the beginning of the lactation period cannot be depended upon to indicate the normal per cent of fat produced by the cows tested."

Bulletin No 101, which is the Report of the Director of the Missouri Agricultural Experiment Station contains a number of results of experiments valuable to live stock breeders all over the country. In the experiments with forage crops for swine the crops used are among those not in general found on the Pacific Coast so we omit that part of the summary. But among the results which will apply here as well as in Missouri are the following:

"Careful investigation covering a long period of time shows that the condition of cattle at the beginning of the feeding period is one of the most important factors in beef production.

"Nitrogenous supplements fed with corn are far more efficient and profitable when fed during the latter stages of the feeding period than when fed continuously throughout the fattening period.

"Fattening two and three year old cattle has been more profitable than fattening yearlings."

In the Department of Dairy Husbandry it was determined that:

"The abnormally high fat percentages which have been obtained in certain seven day tests of dairy cattle have been found to be due to the excessively fat condition of the cow at the time of parturition milk has been obtained showing from five to six percent fat for the first two or three weeks of the lactation period from a cow that will average only three to three and one half per cent for the entire year.

"The investigations made by the Dairy Department have shown that

the size of the cow may be permanently increased by liberal feeding when young."

In the Department of Veterinary Science the findings will be of particular interest to the swine breeders who read the Journal. Of especial interest is the data upon the efficiency of hog cholera serum. This Department found that:

"In experiments made for the purpose of determining the probable immunity of the offspring of hyperimmunized sows against cholera, a permanent immunity was not transmitted to the pigs of such sows in utero. It has also been determined that the milk of such mothers does not give permanent immunity.

"In experiments to determine the efficiency of the mitigated cultures of human tubercle bacilli as a vaccine against bovine tuberculosis (Von Behring's method), it was found that vaccinated cattle contracted the disease when exposed to infected animals even under favorable conditions of outdoor life usually given to cattle on the average Missouri range.

"It was found that the fecal excretions of tuberculous cattle are a much more important source of infection to swine than foods contaminated with the saliva of tuberculous cattle. The dung of tuberculous cattle is highly infectious.

"It has been found that not only do a very large per cent of the swine fed behind tuberculous cattle become infected with the disease, but that some of the pigs show well developed tubercular lesions in less than four weeks from time of exposure."

As the general use of hog cholera serum furnished by the State is practically new in California, we publish the entire report of the Director of the Missouri Station, where the opportunity for studying the effect of the serum has been of sufficient extent to make the conclusions reached authentic. The report says:

"The Experiment Station has continued the manufacture and distribution of hog cholera serum to the farmers of Missouri. The Legislature of 1910-11 made an appropriation of \$25,000.00 for the further extension of the work. The appropriation for this work was not available until about April, 1911. The Experiment Station did not ask for this appropriation of the Legislature, but the value of the work was so apparent that the members of the Legislature believed that a special appropriation for the distribution of serum was good State policy.

"There is now no doubt but that the serum treatment for hog cholera is efficient. It has been found difficult or impossible to manufacture this material in sufficiently large quantities to supply the demand created by the unusual outbreak of last year.

"It has been possible to manufacture and distribute 60,000 doses of hog cholera serum during the year. It is estimated that this work has resulted in increased wealth to Missouri farmers of not less than \$500,000 annually in value of hogs saved, and that equal or large amount by preventing the spread of the disease."



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For the best results and to get the most money out of your different kinds of Produce, ship the same to us. Highest market prices and immediate cash return guaranteed. Send us samples before selling elsewhere. Liberal advances made. Mark and consign your shipments direct to

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As a balancer in making up the ideal ration it is without a rival.

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Animal Food Dept. San Francisco, Calif.

VETERINARY

We cordially invite the readers of *The Live Stock and Dairy Journal* to consult this department. Questions will be answered free by mail, and a stamp should be enclosed for return postage. Give age, color and sex of animals, with full details of symptoms and conditions and previous treatment, if any.

I have a horse sweeneyed in both shoulders. How can I cure him without a severe blister.—W. S., Tehama Co., Cal.

Answer—Inject five per cent solution of nitrate of silver over every two inch square of surface of the sweeneyed parts, using hypodermic syringe and needle.

I have a black mare, three years old this coming June, which has not been broken. About a year ago a soft lump began to form on the joint of the right hind hock. It commences in the front side of the inner joint and runs half way around the socket, then through the socket and forms a lump on the outside a little larger than a hen's egg. I blistered it three or four times two months ago. I am a new subscriber to the *Journal* and am deeply interested in the Veterinary Department. I would like very much to know if anything can be done for the mare, as I would like to break her soon. The lump has never caused any lameness, and the mare is in fine condition, weighing about 1000 pounds.—I. N. H., Placer Co., Cal.

Answer—Clip hair short and apply the following on both sides of the swelling once daily until blistered, then grease for several days and repeat:

Pot. iodidi, 1 ounce; hydra lod. rub. ounce; pot. bromide, 2 ounces; water sufficient to make 1 pint. Apply with brush.

Your valuable paper comes regularly and is read with great interest. I think all farmers should be subscribers to *The Live Stock and Dairy Journal*. Will you advise me what to do for my cow. She is a four year old Holstein, good milker, and is troubled with seed warts which are all over her teats. She has had them about five months. Milking makes her teats sore and painful. Am sending stamped envelope for early reply.—J. A. A., Kings Co., Cal.

Answer—The removal of warts permanently is rather a difficult proposition, but the condition can be bettered by touching each wart with a small wab soaked in sulphuric acid.

As I am a subscriber to the *Journal*, would like to ask you for a little information. I read in the article written by T. J. Gilkerson in the *Journal*, the item of dehorning calves with caustic potash. Will you kindly tell me how to use it?—O. H. P., Loma Linda, Cal.

Ans.—In the March *Journal*, page 7, we replied to a question by Mr. O. L. Graham, Santa Ana, Cal., which is similar to yours, and we reprint the reply:

The best time to dehorn an animal is when it is only a few days old, by using caustic potash. It is a very simple and easy way of dehorning. The method of procedure is something like this: Clip the hair away from the place where the button is starting to form; wrap one end of the potash in paper or cloth to protect the hand and dip the other end in water, slightly moistening it; rub the moistened end of the potash over the skin under

which the button is forming. Care should be taken to prevent any of the potash solution from running down the skin with which it comes in contact. If a scab does not form, which can be easily removed in a few days, repeat the operation.

What can be done for a colt that ran a nail in his foot about a week ago? Matter and stuff are coming from under the frog.—D. S. H., Logan, Utah.

Answer: Cut away entire frog and soak in strong sheep dip solution. Then tie sack on foot and soak same in solution. Repeat twice daily.

REPORT OF STATE BOARD OF AGRICULTURE.

The Report of the California State Board of Agriculture is now ready for distribution. It is by far the most complete report the Board has yet issued. The Report fills a volume of 408 pages. Taking up first the subject of the land in California, showing how and when the various counties were created, and giving some comparative figures showing the great area of the State, it goes on to show the development of every agricultural industry in the State, gives data on irrigated lands, gives elaborate data on each agricultural industry separately, and finally gives a comprehensive report upon California agriculture by counties. This latter feature is especially valuable to anyone who wishes data upon any particular locality in the State. Copies of the report may be had free of charge by applying to C. Allison Telfer, Manager California State Board of Agriculture, Sacramento, California.

The herds at the various State institutions in California have been recently tested for tuberculosis, some reactors were found and provision made for their destruction. At Whittier School, out of 51 animals tested, 42 passed and 9 were killed. At the Sonoma Home a few reactors were found and killed. At Ukiah a number of reactions were recorded, but as the cows are about to calve, they will not be killed until after dropping their calves.

The dual purpose cow has not yet come into her own in California, but the day seems fast approaching when her place in agricultural economy will be better understood and recognized. With the rapidly disappearing range there will come the problem of how and where to produce the beef supply demanded by an ever increasing meat consuming public. In the nature of things, the solution of the problem must be found on the small farm, and it is here that the dual purpose cow will eventually prove the claims made for her by her admirers. Possibly she will not be represented among the record butter and milk producers, but it is certain that with proper handling she will show enough capacity for profit in a combined production of milk, butter, and beef to justify her adoption as the money producer upon hundreds of California farms which at the present time know her not.

Shorthorn Bulls

Two 2-year-old and four yearling Shorthorn Bulls for sale. Roans and Reds and all registered. Also two yearling Percheron Stallions. Apply

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Registered Hereford Cattle for Sale. Excellent Pedigree

JAS. WHITAKER, : : : Proprietor
GALT, SACRAMENTO CO., CALIFORNIA

Howard Cattle Company

You will soon be needing Bulls. We have on hand a number of splendid young registered Short-Horns.

For prices and particulars apply

Howard Cattle Co., 641 Mission St., San Francisco, Cal.

Warren H. Hord

Live Stock Auctioneer

Proprietor of

LINDEN STOCK FARM

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HORSES, HOGS, COWS—Sales conducted in all parts of California and adjoining states
Write for dates and terms

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Phoenix Flour

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For sale at all grocers. Ask for it.

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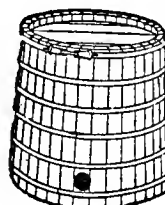
Sacramento

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California



Wine Tank

TANKS

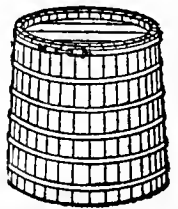
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Water Tank



SHEEP



A Sheep Never Dies in Debt to Its Owner

Ever since the time that Abel kept sheep; since Abraham cared for his flocks on the plains of Jordan; since Jacob kept the flocks of his father-in-law, Laban; since Moses led in and out the flocks of Jethro; since the wandering Arab and the Turkoman led their flocks to pasture and to water, the sheep has been a subject of much concern, says Geo. W. Franklin in *Farm Sense*. The Arab and the Turkoman probably tend the same kind of animals that they did in the far-away day, and being a pastoral people, they are kept for food, raiment, and for building shelter. Whenever a country possessed pasturage in that day sheep were invariably introduced with civilization itself. After the foundation of Rome it was introduced into Italy. For many years the wool was plucked from the sheep instead of shearing. In the dense forests of Germany sheep slowly became a part of the live stock industry of the early day, but the open country of Spain being more inviting, sheep soon made a home in that country. The fleece of the sheep of that day consisted largely of hair, and all wool was kemp and coarse.

To the mind of the student it is to be wondered at that an animal that supplies food, raiment and shelter should at any time in the world's history become in disrepute, and become a hiss and a byword for so many, or that such a man as the irascible old John Randolph should "walk a mile in order to get to kick a sheep," as has been said of him; or that petty conditions will lead sheep owners to stampede at imaginary dangers and fall over each other to get out of the business when they should remain in, or that they should be eager to re-engage in the business at the very time when conditions are not most favorable for that very thing. That a thousand pounds of sheep can graze where a thousand-pound steer can gain a living, and at the same time the thousand pounds of sheep should produce annually a hundred pounds of wool, produce a lamb and represent the original value in the dam is a surprise that more are not only eager to engage in the business, but the surprise is that all do not engage in the business. Probably many have taken fright at the old saying of a sage years ago, who said: "Unhappy is the flock of the golden hoof, or that of the politician who has made such extravagant claims that no sheep can be made profitable under free trade," but, rather, that "The sheep never dies in debt to its owner," and that in England it has been said that "The fertility of the soil cannot be kept up except for flocks of sheep."

Thus it will be seen that the sheep has always had enemies and has been also a victim of many fool friends. The rational and practical way of looking at the business is to see the practical side of the sheep industry, and leaving the patriarchal system of other days to go with systems of that day, we look forward to the present day and return to the animal "with the golden hoof."

Centuries ago it was found that sheep grazing on lands benefited them

more than any other animal that could be grazed on them. Claims have been made that this is due to the fact that the sheep will eat a greater number of plants in its search after food than any other animal, that it assimilates the nourishment for itself and leaves the fertilizing properties well distributed over the land as no other animal can do. A claim has been made, and we believe truly, that to make wool the sheep takes from the soil that property obtained from the air and water, and such fertilizing properties as have been obtained from the soil are largely returned. If this is the case it is easy to see why land should stay fertile while sheep are kept on it.

The early settlers being occupied with clearing the forests and keeping back savage Indians had little opportunities to improve their stock. It remained for others less occupied with a stringent life to improve our sheep. Improved sheep from various parts of the country were brought in; the leading countries contributing were Spain and England. The former gave us our celebrated wool sheep, Spanish Merinos, and the latter has contributed mutton breeds. The first improvement was along the line of wool improvement, and this was conducted along such lines as to make the best wool-bearing animal in the world. In later years more attention has been paid to mutton sheep.

The sheep industry has been one

with letting the sheep man succeed or fail, as the case may be, and he could not, as a rule, be interested in the industry.

It is really a mystery as to why more farmers do not engage in the sheep business as a profitable industry. Certainly no other farm animal can offer as favorable outlook as that of sheep. Their management is peculiar, 'tis true, but the careful, painstaking man can soon get onto the peculiarities of the sheep and profit by their association at close range. We have corn farmers, wheat farmers, potato farmers, grass farmers, hog farmers, cattle farmers and horse farmers, and why not have sheep farmers? Sheep are easily adapted to most farming lands. The fleeces grown on these sheep are no small matter of profit or income. The fertility which comes from sheep is not given the importance which should be attached to it. We need to have flocks of sheep on all of our farms. They can be kept in a way so that their cost will not be much of an item on the average farm. They graze on almost every kind of grass known and will consume many noxious weeds, which will be a direct benefit to the land. They are liable to disease, and so is everything else that lives. Nowhere can an animal be found more subject to fatal diseases than the swine. Cholera has decimated many farms, and has disturbed prospective gains in such a way as to bring disaster to the man who has sustained such losses. Cholera, in a way, is not readily treated or controlled. The diseases to which sheep are heir are more easily handled. The worst enemy which can come to sheep is the stomach worm, and this can be averted under wise management. Dogs will be a disturbing factor in the sheep business in localities where there are more dogs than sheep. These need not be much trouble where a sheep man knows and does his duty toward protecting his property.

We would advise every owner of a farm to keep a few sheep. We advise this from a profit standpoint, and from a standpoint of betterment of the farm. Small flocks can be run in connection with other lines of farm and animal husbandry. A small flock can graze with the cows, and neither be any the worse for the practice. No man should keep more sheep than he can care for at all seasons of the year. Small flocks well cared for are worth



Shropshires Owned by Bishop Brothers, San Ramon, Cal.

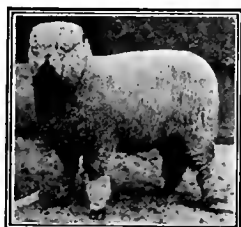
Whatever the analysis shows, one thing we do know is that land on which sheep graze constantly becomes richer, and finally becomes so rich in certain properties that it is with great difficulty that small grain can be profitably grown on such land, because of the inclination to lodge and become damaged by this condition. No man has objected to very fertile land, however.

Early in the settlement of the United States sheep were brought here from various parts of the world.

of ups and downs, and the ups certainly have predominated, for there are more sheep men who have made a success of the business than there are of those who have made failures. Conditions have conspired to regulate the urgency of the sheep business. The early settler of a locality kept sheep for food and raiment. Others kept them for clearing the country of underbrush, and still others kept them because they had contracted the sheep habit. The man who displayed indifference along this line was content

San Ramon Shropshire Flock

PUREBRED AND GRADE RAMS ALSO EWES, FOR SALE. INDIVIDUALS OR CARLOAD LOTS.



First Prize Ewe Lamb at Omaha

BISHOP BROS.

Flock headed by the following prize winning rams:

COOPER (3680)—First at Royal Show, England.

WARDWELL HONEST—First ram, American class, International Chicago, 1907.

P. ROBERT (105)—First yearling lamb International Chicago, 1910.

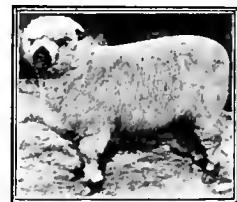
ALTAMONT (4008)—First ram lamb New York, Connecticut and Virginia and White River Junction State Fairs, First International Chicago, 1910.

PRIZES WON BY FLOCK, 1911.

California State Fair—Thirteen out of fifteen first prizes and all of the four championships.

Omaha—First and second ram lambs; first and third ewe lambs.

Our grade rams are raised on the open range.



First Prize Ram Lamb at Omaha

SAN RAMON, CALIFORNIA

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

far more than neglected flocks of larger numbers. The larger the flock the more liability to disease, and the more care will be necessary. Keep the flock up to a good standard by the use of the best sires. Keep sheep and they will keep you. The hoof of the sheep is golden, and there are many reasons for this.

SOME SHEEP ILLS REMEDIES.

Some years ago 30 per cent of my lambs and 10 per cent of the breeding flock died, says a writer in Inter Ocean. On examination I found hosts of stomach and intestinal worms, besides some tapeworms. Losses had gradually increased in the years preceding. Of the lambs that did not die, none were fat, and many were worthless.

I began to drench with gasoline, and used one gill of turpentine to ten pounds of salt kept before the flock. The gasoline and turpentine, used persistently, lessened the mortality and improved the tone of the flock each year.

From my own and the experience of others, I doubt if any remedy can clean up a flock badly affected with stomach worms. I know that gasoline is sure death to tapeworms.

I procured 100 pounds of tobacco dust, and mixed one part of tobacco to two parts of salt, and kept it before the flock all the time, having the box so low the 2-year-old lambs could reach it. Results: I have not lost a sheep or a lamb since, and the lambs at 6 months averaged 100 pounds. Since using the tobacco, I have drenched the lambs once at weaning time with gasoline. I shall continue to feed tobacco.

A year ago many of my sheep coughed badly, and discharged much from the nose. The trouble increased so that 75 per cent were affected. I drenched every sheep twice in three days with a tablespoon of turpentine in one gill of milk. In a week's time the cough stopped and their noses were clean.

About six years ago an experiment was carried on at the Iowa Experiment Station comparing the cost of mutton and beef production. The results showed conclusively that it was from one-half to one-third cheaper to produce a pound of mutton than a pound of beef. At the difference in the price of mutton and the price of beef we could make more money raising mutton than raising beef.

The season in California has been gratifying to sheep raisers in many respects. An unusually high percentage of lambs was saved. Warm spring rains made an abundance of feed, and altogether conditions have been such as to greatly encourage the sheep men. Shearing has been accomplished under favorable conditions, and the wool crop is very good, with prices ranging from 14 to 20 cents.

In a recent letter to the *Journal* Bishop Bros., San Ramon, California, report the sale of thirty-five grade yearling Shropshire rams to P. Connolly, Livermore, California, for July delivery. In 1911 Bishop Bros. were sold out of yearling rams early in the season, and it would be well for intending purchasers to get in touch with them at once for this year's yearlings.

During the latter part of May Mrs. L. R. Hughson of Modesto, Cal., sold to R. L. Miller of Salida, Cal., seven head of purebred Holstein cows for \$1200.

R. A. East of Modesto, Cal., has a new O. I. C. swine advertisement in this issue. Mr. East recently made a sale of four young sows to Hiram Hughson, Jr., also of Modesto.

THE SHEEP INDUSTRY IN THE WEST.

At a recent convention of the Illinois Live Stock Breeders' Association, Professor W. C. Coffey of the University of Illinois delivered an address on "The Sheep Industry of the West."

Professor Coffey said: "The sheep industry here at home has gone through many vicissitudes and discouragements, listening to the call of the cheaper range near the setting sun, terrorized by the predatory animals and internal parasites, strayed off the laud because of lack of fencing, shoved off by the false motto, 'land too valuable,' the sheep industry of this country has been throttled by gross mismanagement.

"I have faith in the demand for mutton—such a demand that the industry must appeal to us here at home. I appeal to you as stockmen, jealous for the good and just recognition of the whole live stock industry, to use your efforts to stimulate interest in the flock, the branch of our live stock industry which should be destined to occupy a unique place in the economy of our agricultural operations."

His address dealt with every phase of the sheep industry, particularly with the profits that accrue to sheep owners in the Western States of the Union. He asserted that discriminating trade who eat mutton are slowly forcing the prices upward, until lambs will sell at 10 cents per pound within three years, and urged all the farmers to devote some of their lands to the raising of sheep for market purposes. Continuing, he said a study of the sheep-grazing industry in this country reveals the density of population since 1850 has been gradually pushed westward from Vermont, until in 1900, the New England States practically forsook the industry entirely.

Sheep raising in the West constitutes a range, which to be ideal must have one on the plains and another in the mountains, the former for winter occupancy and the last named for summer uses. Instances are found where sheep owners have nothing but the plains, but where this is found they do not grow prime lambs for the market, but sell the lambs to feeders.

The holdings range from 300 head in Mexico to 100,000 in western sections of the United States; however, the average holdings are 10,000 head. The labor required is one of the most difficult things with which the owner has to contend. The herders are inefficient, mainly because the opportunity to become an owner is gone. He continued with a detailed account of the duties of the herder and camp tender; told how the sheep were counted, the wages, provisions necessary, all of which unite to enhance the cost of maintenance of sheep herds. Great losses are occasioned through storm, poison herbage, bad weather, shearing and other rough handling, and the attacks of coyotes and other animals.

Following with a detailed statement of the investment required to engage in the business, he said the numerous equipment made the preliminary cost of enlarging in this business meant an outlay of hundreds of dollars. The rents of grazing lands is one of the greatest items. These lands must be rented from the railroads, states and nation. According to the report made to the tariff board, he said it cost 45 cents per head each year for forage, 32 cents of which was winter expenditure. In extreme cases this has crept up to the 94 cents mark, 74 cents of which was winter outlay. Another

discouraging feature of this industry is that there are no statutes allowing sheep herding in the West, and the forestry service can banish the sheep at their pleasure.

Reckoning the percentage of lambs per 100 ewes, he gave this as an average of 70 in times of drought falling exceedingly low. The husbandry of sheep in the West depends largely upon the raising of wool, which is a long feature toward making the business profitable.

In remote places in the West shearing of sheep by machinery is unknown, the hand process being deemed much better, as the wool is not cut too close, and at times the machine shearing causes the animals to blister. The tariff board found the expenditure in rearing each sheep averaged \$2.11, divided as follows: Labor, 63 cents; maintenance, forage, etc., 46 cents; miscellaneous outlays of funds, \$1.02. In Australia, the expenditure is reduced to 93 cents per head each year. The return from each sheep in the West is \$2.56, while in Australia, \$2.23.

THE WEED CROP.

Did you ever stop to think of the tax you are paying to keep up the weed crop? If the State should levy a tax on your crops equal to 25 per cent of the value, you would rebel in righteous indignation. Wouldn't you? Yet a good many of us permit a stand of 25 per cent of weeds to occupy our fields and think we are doing pretty good farming, too.

Why not grow grain or alfalfa, or sugar beets or spuds, or some other good crop, where that weed tax is now growing? The weeds give no return. They draw more heavily on the water supply and plant food supply than paying crops. Paying crops and weeds cannot occupy land at the same time. Let us grow paying crops and get profits rather than pay taxes.

Pound for pound, the plant food required by crops and by weeds is almost the same, but weeds are better food gatherers. The greatest difference comes when the question of water arises. Weeds not only require more water but are able to get it. From 300 to 700 pounds of water are used in producing a pound of dry matter in our common crops. Weeds require even more. If it comes to a contest as to which will get it, the weeds win.—Albert Keyser.

Members of the firm of J. H. Brockman & Co. were recently arrested at Irvington, California, at the instance of the Alameda County Society for the Prevention of Cruelty to Animals. This firm was feeding some 900 head of sheep at Irvington and the charge is said to have been brought in the belief that the sheep were receiving an insufficient allowance of feed. The flock is under quarantine for scab and has been brought to Sacramento County, where they will be dipped.

The Sheep as a Scavenger.

The sheep has been termed the plant scavenger of the farm. In fact, there are very few plants the sheep will not eat during some stage of its growth, and yet the cured fodder and grasses must be of the best quality to retain the best results in feeding operations.

CHAS. A. KIMBLE

Breeder and Importer of

RAMBOUILLET AND AMERICAN MERINO SHEEP

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Frank A. Mecham

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American Merino Sheep

RED POLLED BULLS FOR SALE

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RENO, NEVADA.

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SHROPSHIRE RAMS

140 Head of Yearling Shropshire Rams.

150 head of Ram Lambs.

These are all of my own breeding, and the choicest lot I have ever had.

Also Duroc Jersey Hogs.

ENTERPRISE FARMS

H. P. EAKLE, JR., Prop. (Phone, Res. 1801.) WOODLAND, CAL.

POULTRY DEPARTMENT

Poultry Clubs Find in Favor of State Farm

At a meeting of the California State Federation of Poultry Clubs, held in the rooms of the Chamber of Commerce, San Francisco, April 27th, much business of importance to the poultry industry of the State was transacted. The following clubs were represented by delegates at the meeting:

San Joaquin Valley Poultry Association of Stockton, Alameda County Poultry Association of Oakland, Poultry Breeders' Association of Southern California of Los Angeles, the Orplington Club of California, the Petaluma Poultry Association, the Santa Clara Valley Poultry Association of San Jose, the Livermore Poultry Association of Livermore, the Santa Barbara Poultry Association of Santa Barbara, the Pajaro Valley Poultry Association of Watsonville, the Pasadena Poultry Association of Pasadena and the California Indian Runner Duck Club.

At a meeting of the Federation held at Livermore in February last, rather sensational charges of incompetency and mismanagement of the Poultry Department of the State Farm at Davis were presented for the consideration of this state-wide organization of poultry breeders, and after full discussion a committee was appointed to investigate the actual condition of affairs at the station and report at the April meeting. This report was duly made by the investigating committee, letters from President Benjamin Ide Wheeler, of the State University, and from Professor Wickson, Dean and Director of the Agricultural Department of the University, were read in reference to the charges, and Professor Jaffa, who has charge of the State Farm at Davis, was heard in his defense.

The result of the evidence and discussion of same at the Federation meeting was the adoption of the following resolution by unanimous vote:

"Resolved, That after full investigation of the charges made against the management of the Poultry Department of the State Farm at Davis, and careful consideration of the same, the California State Federation of Poultry Clubs not only finds them not sustained by the actual facts in the case, but it commends unreservedly the present management, which is deemed most excellent, taking into consideration that it is hampered by lack of sufficient funds to properly conduct the department."

One of the main objects of the Federation at the present time is the promotion of a great poultry show at the Panama-Pacific Exposition in 1915. Already assurances have been received that thoroughbred fowls will be present at this show in large numbers from Canada, England, Germany, France, Australia, Japan and all over the United States, and it undoubtedly will be the first really great international poultry show ever held. The Federation is working in conjunction with the Live Stock Department of the Exposition, and also with the active co-operation of the California branch of the American Poultry Association. L. E. Byce of Petaluma, President of the California branch, was present at the meeting, and stated

that there was now no question that the annual meeting of the American Poultry Association, numbering thousands of members from every state, would be held in connection with the 1915 poultry show at San Francisco. This, with the international character of the show itself, will insure the greatest assemblage of poultry breeders and their valuable fowls that the world has ever seen.

The next meeting of the Federation will be held during the poultry show at Santa Cruz the last week in July.

SETTING HENS FASCINATING SIDE OF POULTRY BUSINESS

(By A. L. Jenkins.)

With good, gentle hens the raising of chicks by the natural method is one of the most fascinating sides of the poultry business. It is without doubt a fact that the Asiatics, American and English breeds make the most docile mothers. So if your hens are gentle and easily handled and the eggs are good, you will have no cause for anxiety.

I am a firm believer in the hen-hatched chick, and set hens by the dozen. Still I do not have to go to all the precautions usually commonly laid down in the poultry press. I aim to keep my fowls gentle from the very start, and thus have little or no trouble when they become broody in having them so well behaved that they usually bring off a good hatch.

I set my hens when it suits my convenience—at any hour, day or night. I aim to provide them comfortable nests in a quiet room. For nests I use the ordinary lug box partly filled with moist earth and lined with good straw, and after setting the hen I cover her over with a similar empty box and leave her shut in for a day, after which I remove the cover and take chances. I usually dust the nest and hen in the beginning with insect powder, and repeat this about twice more during the period, and while on the subject of powder let me sound a word of caution against using any preparation or powder on setting hens that contains naphthalene.

The best as well as the cheapest powder to use is the common buhace or Persian insect powder. The odor from naphthalene will cause their combs to turn black, and they will be affected with a severe diarrhoea, and may sometimes die from the effects of it.

I always provide my hens with plenty of feed, such as whole corn, wheat and greens, and keep shells and grits before them at all times. I examine the nests daily, and if they have become soiled I replace fresh straw, and in case the eggs have been soiled I wash them off with warm water, and I don't think it hurts them half so much as leaving them dirty, and besides it is sanitary.

Unless I am setting special eggs I find it a good plan to set as many hens at one time as I can, and after the first ten days I test the eggs and consolidate, if necessary.

It is my experience that the older hens make the best mothers, caring for the brood till it reaches an independent age.

THE CORNISH FOWL.

The Cornish, not a new breed but a tried and true breed, originated in Cornwall, England, in 1840. They have stood the test of some seventy years, and have not been found wanting in that which is required to make up the utility value as well as a value from a fancier's viewpoint.

It is not an idle boast when the Cornish breeders claim that there is nothing in chickendom that equals the Cornish fowl for table. Why? The origin of the breed will show that meat and bone are the essential points desired.

First a Red Aseel was brought to England from India. This bird, short on legs, great on width of body and breast development, compared to other fowls would be like the French Percheron stallion compared with the light roadster. The Red Aseel was



Silver Bill. Prize Winning Silver-Laced Wyandotte Cockerel. Owned by E. B. Neilson, Oroville, Cal.

crossed the Lord Derby English Game and the Malay, and in the early seventies a cross was introduced of what Lewis Wright calls Pheasant Malay.

The flavor of the meat of a young Cornish bird, or a Cornish capon can well be termed a pheasant flavor. In England the Cornish has been a favorite table bird for over half a century.

The qualifications required for a table fowl are, that they should be quick growers, dress well for market, and be attractive in appearance. These qualities the Cornish possess in a remarkable degree. The fancy market in the large cities demands a plump, yellow skinned fowl for the table. Where do you find the healthy richness, the something that looks good to eat, more than you would in a clean-dressed Cornish, with his plump yellow body, yellow legs, and healthy appearance?

I am sure many persons would select a bird of this description over a blue skinned, and perhaps black legged fowl, or fowl with feathered legs.

Neatness, cleanliness, healthy color and appearance, in a fowl dressed for table, with a plump round body, are the popular favorites. I claim that no fowl ever grown can come as near having these qualities as the Cornish. I do not claim the laying qualities of

the Leghorn, Minorca, and other smaller breeds, but I believe the Cornish can be brought up to a splendid laying value by a system of trap nesting.

Many of the more enterprising Cornish breeders are beginning to realize the value of selecting their best laying females and continuing their progeny, discarding the non-laying females, and in this way build up a much improved laying flock.

The late George Lett said that he had one Cornish female in his flock that he would match with any Leghorn in a laying contest, and afterward said that he would match ten of her pullets with ten of any other variety.

We do not expect to produce Cornish females weighing from six to eight pounds each, that will beat the little Leghorn with her four pounds weight. The Cornish is not a lazy bird, being very active, and if properly cared for can be bred up to a high standard of value as a laying fowl.

From a fancier's view, the Cornish are the aristocrats of the show room. Many of the very finest specimens bred in England have been shipped to our fanciers here in past years, and prices are always high.

The American Standard of Perfection recognizes three varieties: Dark, White, and White Laced Red. The variety principally bred is the dark Cornish. In color the male is mainly black, with dark red shafting in neck and saddle, and bay color in wing, causing a greenish black wing bar. The females are mahogany bay, with a double lacing of black on each feather. Shanks and toes are yellow.

The White Laced Red are, as the name indicates, red with white lacing in same manner as dark variety. The Pure White Cornish are popular with many on account of color.

A. H. CURRIER.

EXPERTS GIVE RESULTS OF POULTRY FATTENING TESTS

The results of extensive fattening tests, showing the methods of feeding and the costs of gains, are given in Bulletin 140 of the Bureau of Animal Industry, United States Department of Agriculture.

The method used by most of the large establishments engaged in fattening poultry in this country is to feed the chickens in crates from troughs, according to information collected by the United States Department of Agriculture. From six to ten birds are placed in each division of the battery or feeding coop, depending on the size of the birds and the ideas of the feeder. Two or three chickens do better in a division together than when only one bird is placed in each compartment, and the cost of equipment and labor per bird varies inversely with the number of birds in each division. Another method which is used to a considerable extent on a small scale in this country is pen fattening. This method is adapted for use on the farm where the farmer does not care to go to the trouble of crate fattening, or where the price received for well-fed birds does not warrant the extra labor and feed cost of the crate method.

Most "milk-fed" chickens are fed for fourteen days, but results indicate

that a more profitable gain can be secured in a shorter feeding period, provided the same price per pound can be obtained for the finished product. Practically all of the special feeding in this country involves the use of milk, thus producing "milk-fed" chickens. Milk, while the least expensive, seems to be the most essential constituent of the ration, and when a feeder cannot get milk in some form he generally does not attempt to fatten poultry commercially. Fresh buttermilk, condensed buttermilk, and skim milk are preferred in this relative order. The feed is mixed to the consistency of thick cream, or so that it will drop from the tip of a wooden spoon. Rations of 50 per cent corn meal, 40 per cent low grade wheat flour, and 10 per cent fine shorts; or 58 per cent corn meal, 36 per cent oat flour, and 6 per cent tallow, by weight, give very good results, producing gains which cost from 6.45 cents to 7.74 cents per pound. Low-grade wheat flour is a more economical feed than oat flour at the present prices of grain.

THE PETALUMA DISTRICT.

Statistics of shipments of eggs from Petaluma, Cal., the world's greatest poultry center, are indicative of greatest prosperity, and are reassuring that the magnitude of this profitable industry is becoming greater each year.

In 1911, 8,134,127 dozen eggs and 80,553 dozen poultry were shipped from Petaluma, which, compared with 7,288,215 dozen eggs and 76,278 dozen poultry shipped in 1910, indicates a gain of 845,912 dozen eggs and 4275 dozen poultry. Aside from these shipments there must be considered the millions of eggs used in the hatcheries and in the individual incubators. The poultry industry in Petaluma is so scientifically and practically carried on that it has often been said that if children were as carefully fed and cared for as the Petaluma ranchers feed and take care of their chicks, there would be less sickness and fewer deaths.

The breeding, feeding and housing of chicks are systematically carried on by different methods applied by different people, but the fundamental principles of success are the same in every instance. They are good location, good stock, cleanliness and good care. None of these essentials incur a great deal of laborious work, thereby making the industry one which can be conducted without the years of toil imprinted upon the shoulders of the human being. Aside from light physical labor and the enjoyment of fresh air, there is a great sphere offered for mental work, for the industry offers opportunity for much thought and consideration, and the man who applies his mind will get the results.

According to the New York Agricultural Experiment Station, the cost of food, per chick, to weigh one pound, on ground grain, is three cents; on whole grain, three and seven-tenths cents. After making repeated tests in feeding, this station says the ground grain ration proved considerably more profitable than the whole grain ration with the growing chicks; and the same was true of capons of equal weight from these chicks, and from others of equal weight and age, fed alike before caponizing. No difference was noticed in health or vigor of chicks or capons fed either ration.

Never salt a horse's feed in the box. Place a big lump where he can reach it, and he will take it when he needs it.

The pure-bred sire and a dam of the same type of as good blood as it is possible to get will usually bring a desirable colt.

HOW TO KILL THE CHICKEN MITE.

By Prof. H. C. Pierce, Iowa Experiment Station.

The common bloodthirsty chicken mite is the worst pest the poultryman has to contend with. It lives and breeds in cracks, crevices and corners of the roosts, building, nests and elsewhere in the poultry house. It generally attacks the fowl when upon the roost or nest.

The best remedies for mites are cleanliness, sunlight and spraying with disinfecting solutions. The poultry house and fittings should be so built as to be easily cleaned. The walls should be smooth and as free from cracks as possible. Nests, roosts and dropping boards should be easily removable to allow spraying of their entire surface and the walls beneath them.

There are several preparations for the eradication of mites, among the best of which is cresol soap.

Shave or chop one ten-cent cake of laundry soap into one pint of soft water. Heat or allow to stand until a soap paste is formed. Stir in one pound of commercial cresol and heat or allow to stand until soap paste is dissolved. Stir in one gallon of kerosene. For use dilute with fifty parts of water, which will make a milky-colored liquid.

Commercial cresol is a coal-tar by-product and may be obtained from the druggist at about thirty cents per pound. Care should be taken not to get any of it upon the hands or face, as it will cause intense smarting.

Any of the commonly advertised coal-tar stock dips may also be used with satisfactory results. They may be diluted with fifty parts of water.

Apply with a large brush or with a spraying machine. A good spraying machine is quicker and more efficient than a brush. Great care must be taken to fill thoroughly every crevice in the walls, perches and nests with the liquid. These mixtures will kill every mite with which they come in contact, but it is impossible to get all of them with one spraying.

Two thorough sprayings should be made on the first day. The next day a careful examination should be made and if any mites can be found alive the house should be thoroughly treated again. Although these solutions will kill the adult mites, it is not likely that they will reach the mite eggs and prevent them from hatching.

The houses should, therefore, be thoroughly sprayed twice again at intervals of one week. This will catch any mites that have hatched out from eggs laid previous to the first sprayings.

Before sitting hens are placed upon eggs for hatching the nests should be thoroughly saturated to kill any mites that may be present and to forestall immediate infestation. A teaspoonful of the undiluted cresol soap solution placed beneath the straw in the hollows of the nests will keep them free from lice as well as mites, but it should not come in contact with the eggs.

SALT FOR CHICKENS.

Experiments at the agricultural stations have demonstrated that the moderate use of salt for fowls is beneficial.

A feeding trial was made with twelve hens to get some suggestions as to the approximate limit of its safe feeding to mature fowls. For one lot of hens salt was mixed in the food, increasing in amounts by periods of feeding until it was fed at the rate of 0.63 ounces per day per fowl, nearly one-half pint per day for 100 hens. No bad effect was noticed. With this

amount, however, diarrhoea attacked a few of the hens, but the trouble disappeared when the amount of salt in the food was reduced about one-third. When the hens were allowed free access to boxes of coarse barrel salt not enough was eaten to show any ill effect, either by hens that had been fed salt freely for two months or by those which had been without any for the same time.

Little significance was attached to the egg yield from these old hens, fed at an unproductive time of the year, but twice as many eggs were obtained from the salt fed hens as from the others. When reporting the experiment it was suggested that salt at the rate of one ounce per day for 100 mature hens could be fed without risk, but in later feeding it was found that five ounces of salt in every 100 pounds of food was a safe proportion. The station has not advised the feeding of salt to young chicks, or until they are 2 to 3 months old.

WATER THE CHEAPEST POULTRY FOOD.

We believe that more poultry does poorly from lack of ample water than from short food supply, says Mrs. B. F. Wilcoxon. Generally, particularly in the summer, when there is among all animals the greatest suffering from thirst, a hen can, if nothing better can be found, fill her crop with grass and the tender leaves of weeds when running at large; but often water can only be had from wells, and it takes something stronger than a hen to get at it.

Eggs are fully eighty per cent water, and in very warm weather many a poor hen does not get enough water during the day to supply an egg, say nothing of the large amount needed for her closely feathered, overheated body. Many seem to think almost any kind of filthy water will do for the poultry, and still more appear to think, if they think at all about such things, that one good drink a day is pretty liberal watering. We put out a pan of water to a flock the other day whose owner had just told us his poultry always had enough water, and the rush and crowding to get just a little of the precious drink was something pitiful to see.

This man had just been complaining to us of the cost of his chicken feed, and there his poultry were nearly dying for the want of a perfectly costless food his inexcusable negligence had failed to supply them with. Man can live without food for weeks if given plenty of water, but shut off the water and no amount of dry food can keep him alive more than a very few days. No matter how well-to-do a poultry keeper may be, he cannot afford, say nothing of the humane side of it, to let his fowls want one hour for plenty of fresh, clean drink. It is a cruel shame to do it; besides, it is worse than inexcusable waste. It costs little to have a good, clean, protected and shaded earthen drinking pan, and nothing on the farm pays better than to keep it filled.

ANNUAL STATE FARM PICNIC

The annual picnic at the State Farm at Davis was held Saturday, May 11th, and was the most successful yet held. There was a large attendance of farmers from all the surrounding country, and the day was thoroughly enjoyed. Much interest was manifested in the various departments, all of which were open to inspection. The parade of registered live stock, consisting of Jersey, Holstein, Hereford, Polled Angus and Shorthorn cattle, Clydesdale and Shire horses, was one of the best features of the day.

TIME TO FEED

Coulson's Growing Chick Food

When your chicks are six weeks old they should have this food. It is a wonderful body builder, and will be found of exceptional merit in bringing your flock of little fellows up to the period of market sales and egg production.

If you will try a sack you will soon be convinced that you have found the right food. You will use it right along and secure added profit on your work.

"Poultry Feeding for Profit," a booklet, will be mailed free on request. You need it. Send for it.

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Return this coupon and 35 cents (cash or stamps) and we will send you American Hen Magazine until January 1st, 1913 (regular price 70 cents). This gives you 70 cents worth of the **BEST POULTRY JOURNAL PUBLISHED** for only 35 cents. American Hen Magazine has reliable writers on all subjects pertaining to poultry, fruit, pigeons, nuts and bees. It contains valuable information on how others have made from \$6,000 to \$20,000 a year from the investment of only a few dollars.

Joel M. Foster, a young man, made \$19,484.83 in one year. The Curtis boys made \$100,000 from their chickens. Mr. Parrin made over \$1,800 on a village lot. The Cornings (father and son) made \$12,000. One man made over \$35,000 in two years. Ernest Kellerstrass made \$18,178.53 last year. E. R. Philo made \$1,500 from 60 hens in 10 months.

Many others are making a snug fortune each year. Are you? Remember, you can make an independent living from chickens ON A CITY LOT, right in your own BACK YARD. Read "A Fortune Raising Chickens on the No-Yard Plan" in American Hen Magazine.

Return this coupon and thirty-five (35) cents today. A single copy is worth more than \$35.00 to the man, woman, boy or girl who wants to **MAKE MONEY FAST.** (Published each month.)

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The Co-operative Land and Trust Company of San Francisco is offering some first-class alfalfa land in the classified columns.

Questions and Answers

EDITED BY A. H. CURRIER.

A valuable and instructive feature of our Poultry Department is "Questions and Answers." Any of our subscribers desiring advice or information upon any matter pertaining to poultry raising will please address Poultry Editor, The Live Stock and Dairy Journal, Sacramento, Cal., and answers will be printed in this department.

In my poultry yard there are 160 12-month-old pullets. On the first of March I gathered 96 eggs, on the second 60, on the third 45, on the fourth 80. At present they are laying 50 to 60 a day. Where does my trouble lay? My feed is just the same, but the hens are not fat. We are keeping them as an experiment, which is quite costly, but will do me a world of good. It may be, and no doubt is, a poor laying strain, but they are supposed to be well-bred hens. In March I found at different times seven hens with and in a few hours their combs and swellings on their wattles and throat, wattles got as blue as indigo. This lasted from one to two days, and it went as soon as it came, leaving the combs very light.—W. H., Turlock Cal.

Answer—First: Your flock of hens, I think, is laying as well as the average flock. If you give a mash once a day, some variety to the grains fed, and a supply of green food, with meat in some form, they might be made to increase their egg production; but from my experience and observation in the State, flocks of any size seldom get much over a 50 per cent daily egg production, and do not, as a regular thing, average that.

Second—The sick hens you mention, must have had some form of bronchitis, causing the congestion of blood in head, caused by a sudden and severe cold and is often accompanied with hard breathing and rattling in the throat. Three drops tincture of aconite every hour will usually give relief. See that your roosting houses have no drafts across the roosts. Three sides of houses should be perfectly tight to have healthy fowls. The same appearance of head is sometimes caused by diphtheritic roup, canker forming in throat and windpipe, but if this very contagious disease got into your flock they would not have gotten over it so soon, so in your case they must have taken cold.

The Live Stock and Dairy Journal—Will you kindly inform me in your next Journal what to do for worms in chickens? Can they be gotten rid of? What can I do to prevent them?

MR. B.

Kirkwood, Cal.

Answer: Mix spirits of turpentine with mash at the rate of a tablespoonful to each ten (10) fowls three days in succession. Then on the fourth day mix a tablespoonful of epsom salts to each six fowls, in the mash. If worms are not expelled, repeat both treatments the following week. Try and locate the cause of worms in your chickens. Fowls having access to putrid meat or filthy food of any kind may become afflicted with worms. Charcoal and salt fed regularly in the mash, and chopped onions occasionally, will have a tendency to keep your birds healthy. The houses, yards, food and water troughs should also be looked after and kept clean. A little copperas in the drinking water is a good tonic. With clean food and water, healthy stock should never have worms.

CHARCOAL FOR YOUNG CHICKS.

There is nothing better for bowel troubles in little chicks than freshly burned charcoal, says a writer in Colman's Rural World. The charcoal grains are also excellent and are said to be efficacious in roup. The greatest problem with little chicks in brooders is bowel trouble, which arises from several causes—chilling, too much heat, crowding, lack of exercise and a wrong diet. If charcoal is pulverized every day and mixed with the food the bowel trouble quickly disappears, provided other faults are remedied. Charcoal is a corrective and not a medicine. It absorbs gases and promotes digestion of the food. It is most efficacious when freshly prepared, but when allowed to stand it absorbs odors and gases from the atmosphere which partially destroy its healthful qualities. It may be fed in any quantity, for the fowls will not use too much of it, but for larger birds it should be placed in boxes and put where they may have access to it. Of course it must be renewed often if used in this manner. For little chicks, which need it at once, it should be mixed in the food in small quantities until some effect is seen, and then the quantity moderated to a regular proportion each day. For the brooder chicks it will be found one of the best regulators known.

"Practical Poultry Keeping" and "Profitable Breeds of Poultry" are the titles of two books just published by the Outing Publishing Company, 315 Fifth avenue, New York City. The first is by R. B. Sando. It is a comprehensive book written in an elementary manner for the beginner or the breeder on a small scale, yet it might be read with profit by many who have had experience. "Profitable Breeds of Poultry" is by A. S. Wheeler. It discusses the merits of the various breeds of chickens common in this country, and also contains a chapter of practical information on housing and management. Price, 75 cents each, postpaid.

R. S. Owens of Sacramento recently purchased twenty acres near Valensin and leased two hundred and forty acres more. Mr. Owens will raise White Leghorns on the twenty and Bronze turkeys on the two hundred and forty. Turkey raising in this locality has been very profitable for the past year or two, and Mr. Owens will, no doubt, be successful in his new venture.

The Orland Poultry Association has been organized at Orland, Glenn County, California, and is talking of holding a big show the coming fall. A committee has already been appointed to make preliminary arrangements for the show. The officers of the new association are P. J. Hicks, President; M. A. Saylor, Vice-President; George Liefried, Secretary; C. N. Harloson, Treasurer.

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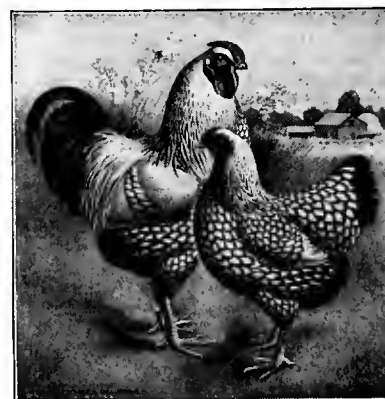
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THE GREAT WINTER LAYERS.

Silver-Laced Wyandottes are holding their own in all three of the big contests now being held in the United States. In all of these contests they are holding second place. In the Missouri egg laying contest they have 309 eggs to their credit against 310 eggs for the first three months of the contest.

Eggs \$2.00 and \$3.00 per setting of 15. I guarantee a good hatch or replace the setting.

NEW AGRICULTURAL BUILDING AT STATE UNIVERSITY

Agricultural Hall, built at the University of California at a cost of \$200,000, to house some portion of its teaching and investigating in agriculture, has just been completed.

This new white granite building, roofed in red Mission tile, and picturesquely set on an eminence looking south toward Dana Street entrance to the Berkeley campus, is one of the permanent buildings of the Phoebe A. Hearst plan. It is fireproof, solid and staunch in construction, with steel frame and concrete floors and roof. After a thousand years it ought to be as good a building as it is today. Special merits of the building are that the long north wall is mostly windows, to admit to the full the north light prized for laboratory work, and that it is so planned that every square foot of space is well lighted and thoroughly available.

Entering the building, the visitor will find himself in a curving corridor, walled with museum cases. Here will be exhibits showing the plant in health and in disease. In glass cases and jars will be choice specimens of the typical grain and field crops. In other cases will be California fruits and vegetables, grain and field crops. In other cases will be exhibits showing the insect pests, and bacterial and physiological plant diseases which the University is teaching the farmers how to control or prevent.

From the museum corridor the visitor may enter the main lecture room of the building, a semi-circular room with seats so planned that the 400 auditors may all be brought into favorable positions to see the lecturer's specimens, experiments, charts, or stereopticon pictures. This room will be in constant use for large classes and for the frequent evening lectures on scientific subjects given at the University for the students and the general public.

How to spray trees and plants so as to prevent or cure disease or pest will be taught and experimented with in a laboratory on the ground floor. Here also will be laboratories for work in irrigation and in bee-raising and a room for mailing the bulletins on improved agricultural methods of which the University publishes and distributes hundreds of thousands of copies every year.

Horticulture and Viticulture are the subjects to be housed on the first floor of the building. Here also will be the office of E. J. Wickson, Professor of Agriculture and Director of the United States Experiment Station, and the business office of his department; where the affairs are looked after of the 378 students in the full four-year course in the College of Agriculture and the 900 other students who are receiving more or less agricultural instruction. From this and the other offices of the department over 50,000 answers to inquiries in agricultural problems go out every year. Here also will be the agricultural library and the quarters of Professor Warren T. Clark, Superintendent of University Extension in Agriculture, who has had charge of the work of the agricultural demonstration train, sent out by the University of California, through the generous co-operation of the Southern Pacific Company. This train, with its eight cars of agricultural exhibits, has been visited this year by over 100,000 persons, while the 105 farmers' institutes, in 105 California towns and villages, have brought together total audiences of over 34,000 people.

Entomology and plant pathology are the departments which will occupy the third and fourth floors of the new Agricultural Hall. Here research

work will be carried on, and students trained so that in their work hereafter as fruit-growers, farm-managers, vineyardists, horticultural inspectors, State or United States agricultural experts, or experiment station or college teachers, they can apply scientific methods of studying the life-history of destructive insects, the cause and progress of plant diseases and preventative and curative methods. Here also will be a museum of insects, draughting-rooms for the United States Government irrigation and drainage experts who make their California headquarters at the University of California, and several darkrooms for photographic work in preparing illustrative material for agricultural publications, bulletins, lectures, and classroom and farmers' institute work.

Agriculture Hall will house only a small portion of the work of the College of Agriculture. It is hoped in future years to build at least three other permanent buildings of equal or larger size, forming a quadrangle of which this building is the first member. In these additional buildings will be accommodated some day departments of the agricultural work of the University which must now remain in their present cramped quarters, among them being animal industry, including dairying, livestock breeding and feeding, veterinary science, and poultry raising; parasitology; the physics; chemistry, geology and bacteriology of soils; agronomy; the inspection of insecticides and of commercial fertilizers; nutrition, and the important work of the pure food laboratory of the State Board of Health; and agricultural education.

ARTIFICIAL INCUBATION.

According to the Rhode Island Experiment Station, post-mortem examination has shown that death of chicks during artificial incubation and rearing can be laid to four causes: First, to heredity or to environment during period of incubation; successive alternate periods of heat and cold during incubation are responsible for a very large proportion of abnormalities. Second, to overcrowding in the brooders, resulting in death by suffocation, trampling, etc. Third, to imperfect sanitation, lack of ventilation, sunlight, etc.; tuberculosis flourishes in the dark, poorly ventilated brooders. Fourth, to imperfect feeding. For the continued maintenance of health there must be a definite proportion between the amount of carbohydrates, fats, and the nitrogen-containing proteins. A ration wholly vegetable is almost certain to contain a too low percentage of nitrogen, while a ration exclusively animal is very sure to be deficient in carbohydrate.

ALFALFA FOR CHICKENS.

Alfalfa, which furnishes an excellent green feed for chickens, may be successfully raised for heavy pasturing by methods recommended by the Colorado Experiment Station. A recent bulletin from the alfalfa expert says that alfalfa crowns that have been cut off and plowed under and that have taken root again, are much harder to kill out, as many have found by repeatedly grubbing out the same stool that has taken root the second time. Such crowns seem to put out shoots from each piece of root that is left in the ground, if the soil is in favorable condition.

Those who desire to establish alfalfa in their poultry yards can succeed in this way by plowing or spading under alfalfa crowns that have been freshly plowed out from some field near by. Early in the spring is the best time, while the crowns are still dormant. The crowns should be

covered four to six inches deep, and the soil wet down and kept moist and the chickens kept off until the crowns have become established, which will be much sooner than alfalfa from seed, and will stand much harder pasture.

MEETING OF TULARE DAIRYMEN

The Live Stock and Dairy Journal—The meeting of the Tulare County Dairymen's Association, held at Tulare on Saturday, May 25th, was well attended, and two good sessions were held, one in the morning and one in the afternoon.

Mr. C. G. McFarland gave a splendid talk on the use of ensilage and the best crops to raise for that purpose, and how to raise them. Mr. Raitt of Poplar spoke on the construction and cost of silos, and gave the members much valuable information. Mr. Warren Thurston delivered a very instructive and interesting speech on breeds of dairy cattle.

Mr. C. A. Peairs spoke on the advisability of keeping sires until the quality of their daughters had been determined. Mr. F. W. Andreasen gave an interesting and highly instructive talk on general dairy subjects.

A question box was placed accessible to all, and a number of questions were written and placed in the box during the meeting. Before the close they were taken out and answered by members who had had experience in the matters inquired about.

CORRESPONDENT.

Tulare, Cal.

As the Journal goes to press we are informed that George O. Hillier, Modesto, Cal., has just purchased the seventeen head of Jerseys which were recently purchased at the George A. Smith sale by J. N. Lester of Berkeley, Cal.

THE NECESSITY OF GOOD STOCK

The Live Stock and Dairy Journal—The most essential point of successful dairying, in my mind, is to buy the best stock possible, being governed by the amount of money one can possibly spare, and breed and feed them to be better, which takes much time and very careful selection, and testing often enough that one may be sure of every cow's earnings.

I believe in purebred stock, the breed to be selected depending on the owner's fancy, but if it is not possible to have purebred cows, then by all means keep a purebred bull of some proven family, but secured from some breeder who is capable of developing that family to a paying basis.

I know of men spending a great deal of money in getting good stock and then not being able to care for them in a manner that would keep them up to the standard profit, to which such breeding entitles them.

B. B. HINSHAW.

Sonoma County, Cal.

In the May issue of the Journal it was stated that the American Shropshire Association had made appropriations to the Interstate Fair at Spokane. We have a letter from the Secretary of the Association calling our attention to the fact that no appropriations have been made to this fair.

President E. W. Howard of the California Live Stock Breeders' Association has announced the appointment of the Executive Committee of the Association as follows: F. J. Sinclair, Secretary; E. L. de Cebrian, Treasurer; Wm. H. Saylor, A. J. Molera, R. Jacks, Edward F. Bishop, G. L. Warlow, T. H. Ramsey, S. F. B. Morse, Judge Peter J. Shields and T. B. Gibson.

KEEP HOGS FREE FROM LICE

The Live Stock and Dairy Journal—I have been quite successful in the swine business, and consider that I owe a great part of it to the matter of cleanliness, especially in keeping them free of lice. To me this is the most important part of the swine business. I have used all kinds of disinfectants, but have found none that gave entire satisfaction until I tried a preparation manufactured by a local man. It is used as a spray, and five gallons, costing \$1, will spray one hundred head. It does not evaporate quickly, but remains on the animal for at least one week, owing to the oil it contains, which is not crude oil. As I have had such good success with it at such small cost I am more than glad to advise others of it. The party does not advertise, having been using it only on his own stock. A few days ago I persuaded him to put it on the market. I use it also in spraying the pens and nests. Two applications three or four weeks apart will completely destroy all traces of lice on any animal.

R. C. PLACH.
Alameda County, Cal.

THE SAME OLD MORAL.

We recently had a refreshingly pleasant chat with a breeder who called at our office and gave us some inside information as to how he became converted to the truth of BETTER STOCK. This gentleman was the owner of a dairy which was about the average quality in his neighborhood, the cows being the nondescript variety which he does not now hesitate to call scrubs, although, as he says, there were a few good producers in the lot. He kept an accurate set of books on the dairy, and the financial results were anything but satisfactory. Convinced that something was wrong in his methods or equipment, he started out to find the leakage. Investigation eliminated the cost of feed, of labor, and of general conditions surrounding his herd, and finally narrowed down to the individuals of the herd. He knew a dairyman in another locality who also kept accurate accounts of his business, and he went to him to compare notes. The figures he obtained from his friend showed him a startling contrast, and pointed the way to the improvement of his own dairy. The friend's dairy was made up of high grade cows, many of them of almost pure blood, produced by a number of years of the grading up process. The figures showed that 8.36 cows of this herd netted as much in one year as the entire 34 head of the scrub dairy netted in the same length of time. Here, then, appeared to be the reason for the difference, and an immediate start was made toward grading up the scrub dairy. As the process has been gradually extended, the profits have increased, until today there is a small purebred herd on the place and the dairy of high grade cows is returning a handsome profit.

Same old moral: GRADE UP!

At the Lake Mills, Wis., sale, Pontiac Korndyke, a son of King of the Pontiacs, dam Hengerveld De Kol, sold for \$2000, while a 4-year-old cow from the herd of John Hettis was sold to R. E. Haeger, Algonquin, Ill., for \$1400.

Eagleson & Sons, Lake Mills, Wis., are considering the holding of their fall sale of purebred Holstein-Friesians at Sacramento, Cal. We believe that this would be an excellent idea, and would give California breeders an opportunity to make their selections right at home.

we say: "Journal advertisers get RESULTS!"

they say:

We wish to say that our advertisement in the Journal has given us very good returns.
MOORE BROTHERS.

El Centro, Cal.

I am beginning to think that advertising in your paper is a great thing. If the letters come in any faster asking about Berkshires, saying that they saw our advertisement in *The Live Stock and Dairy Journal*, I will have to get a secretary.

LOCUST FROVE FARM.

Ripon, Cal.

As pleased to state that your Journal has proved a great success as an advertising medium, and has brought handsome returns; in fact, more cash business than all other papers combined.

FRANK HAASIS.

Ontario, San Bernardino County, Cal.

The Journal does us more good than all the other papers put together, that we have ads. in.

FOUR OAKS STOCK COMPANY.

Woodland, Cal.

My advertisement in the Journal has brought me very good returns, having shipped eggs to Phoenix, Arizona, have a setting to go to Montana to-morrow, and have sold a number of settings and some stock in Nevada. Your paper must reach a great many people, as I have sold all the eggs I got this year, through the Journal.

E. B. NEILSON.

Oroville, California.

Enclosed you will find check for ad. Horse is sold. Your ad. surely did the work in short time—only one week after publication.

A. H. BLAKELY.

Ontario, San Bernardino County, Cal.

If everyone who advertises with you gets as good results as I have, your paper should certainly be greatly appreciated. I have paid you something in the neighborhood of \$50 for advertising, and can trace directly to those ads. sales aggregating \$8,880, and partially due to same ads. sales amounting to upwards of \$3,000.

H. B. THORNBERRY.

Box 679, Stockton, Cal., or
Box 1117, Los Angeles, Cal.

I have advertised in nearly every farm paper on the Coast and have found it very expensive. I gradually cut out those not bringing any returns, and now use space in but six papers, and I believe I make more sales from my advertisement in *The Live Stock and Dairy Journal* than all the rest combined.

G. A. MURPHY.

Perkins, Cal.

The above letters came to us absolutely unsolicited.

Now, what do

you say: to placing **YOUR** advertisement in the Journal. The July issue, the largest we have ever published, goes to press June 25th. Send in your copy early as possible.

THE LIVE STOCK AND DAIRY JOURNAL,
Sacramento, California

THE ROAD TO TRAVEL ON

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SOUTHERN PACIFIC

PERFECT SERVICE
COMFORT & SAFETY

Any Route---North or South, East or West

For information on or from any locality, inquire of

JAMES O'GARA, D. F. & P. A., EIGHTH AND K STREETS, SACRAMENTO, CAL.

THE LIVE STOCK and DAIRY JOURNAL

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

JULY, 1912



D. O. LIVELY

Chief of the Department of Live Stock.

Panama Pacific International Exposition, San Francisco, California, 1915

AGRICULTURAL PUBLISHING COMPANY, SACRAMENTO, CAL.

The Live Stock and Dairy Journal

An Illustrated Monthly Publication for the Advancement of the Live Stock, Dairy and Poultry Industries of the Pacific Coast.

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R. D. McFARLAND, Managing Editor
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One Year - - - - - \$1.00
Six Months - - - - - 60 Cents
Payable Strictly In Advance.

The Journal is stopped promptly at expiration of subscription period, unless remittance for renewal is received, thirty days' notice being previously given.
If you want to buy or sell any stock or merchandise in the great live stock, dairy and poultry centers of the Pacific Coast, get in touch with our advertising columns. We believe all advertising in this paper to be from persons or firms of the highest reliability. Every effort is made to protect our readers against misleading representation. We shall at all times appreciate evidence that advertisers have acted otherwise than in accordance with principles of strict business integrity.
The Journal is issued on or about the 5th of each month. Copy for all reading and advertising matter must be in our office not later than the 25th of month preceding date of issue.



PUBLIC SALES.

California breeders of purebred live stock have not come to a full realization of the value of public sales as a means of disposing of their surplus stock, and of stimulating the stock business in general.
We believe that public sales of dairy stock and of several of the swine breeds could now be very successfully held in this State if properly managed, and the establishment of annual sales is about the next step demanded in the natural growth and development of live stock interests.
The recent declaration of an Eastern breeder of dairy stock that his next big annual sale will probably be held in Sacramento, Cal., bears considerable significance, and should start our own breeders thinking.
In this connection we read with interest an article in the Berkshire World by G. W. Berry, a Kansas breeder, who has had wide experience in public sales, and who gives some splendid arguments regarding their advantages. Mr. Berry says, in part:
"From time immemorial the public sale has been a favorite mode of making transfers of improved stock. In Great Britain, the home of the pure breeds, auctions create almost as much interest as do fairs and stock shows, and many important facts in breed history originated in public sales of cattle and swine. In America as well as in the British Isles breeders of Shorthorns and Herefords have

made history by holding public sales that attracted universal attention. Breeders of swine have been no less successful than cattle breeders in notable auction events. Such sales, whether of national or local importance, can be looked on as milestones along the broad highway of improved stock breeding.
"Many successful breeders adopt the system of public sales as the most convenient method of disposing of the increase in their herds, at regular intervals, either at home on the farm, in the nearest good town or abroad. Breeders who hold sales systematically are generally, singularly successful. Perhaps one reason why such breeders are usually successful is because nearly every one of them practice good business methods; and it can be readily understood that the breeder who carefully plans a series of public business meetings of such character is a good business man. The breeder who prepares for a sale event by selection and reservation of choice individuals, accumulates capital in a collection of animals and disposes of a considerable amount of business in one day. To the busy man whether he is engaged in farming or some other industry, the saving of time is a big item, besides the receiving of a large amount of money, which is usual in public sales, is an advantage. The public sale gives the herd wide publicity, and the sire is brought into prominence. The holding of a public sale at the home of the breeder tends to 'put the farm on the map.' If it is held in the home town it 'puts the town on the map,' and many little country places have been widely advertised by the breeder who holds a sale. These events are often the meeting places of representative men from widely separated sections of the country.
"The benefits received through a well advertised sale continue long after the day of the auction. Through the influence of catalogues that are sent out as well as the results of advertising inquiries for stock will be received and future private sales made of stock in addition to that which is catalogued. The owner of a good herd can always expect a good aftermath to enhance the profits of a well advertised sale. No one can foretell just from what places buyers will come to a public sale, and they come from unexpected sources afterward as a result of the publicity. Another result of the public sale is seen in the greater interest in the herd, and in breeding in general awakened among the farmers in the vicinity. Farmers in the neighborhood will visit perhaps for the first time the breeder who holds a sale. His farm becomes the meeting place of his friends and neighbors who are interested in improved stock, better farming and up-to-date methods. Visitors at the sale have the privilege of seeing the breeding herd with the sires and dams in use and at the same time compare improvements and equipment and method employed in the care and management."
THAT'S WHAT THEY ALL SAY
Received my first copy of *The Live Stock and Dairy Journal*, and think it the best live stock journal published on the coast. I am starting a herd of registered Berkshires, and expect to have an advertisement in your paper before long.
R. MERRILL
Santa Clara County, Cal.
We read the *Journal* with much interest and believe it is a live wire and destined to do much good by way of creating a deeper interest in purebred stock on this coast.
WEAVER STOCK FARM.
Imperial County, Cal.



Professor F. R. Marshall. New Head of Animal Industries Department, University of California.

Professor F. R. Marshall, who comes to California August 1st to take the professorship of Animal Industries in the University of California, with headquarters at the State Farm at Davis, has had wide experience in live stock husbandry, and his name is known throughout the nation among breeders and stockmen.
Professor Marshall was graduated from the Agricultural College of the Province of Ontario, Canada. Following that he was a year as a student at the Iowa State College at Ames, then assistant to Professor J. A. Craig in the Department of Animal Husbandry in that college. He remained in the department at Ames for two years and a half, at the end of which time he took charge of the Department of Animal Husbandry at the Agricultural and Mechanical College of Texas. He conducted the teaching and experimental work of that department for four years, then went to the professorship of Animal Husbandry in the Ohio State University in 1907, remaining there until the present time.
Professor Marshall is author of a book entitled "Breeding Farm Animals," which is regarded as one of the best books of the kind published. He was joint author of several bulletins from Iowa and Texas stations.
We feel sure that Professor Marshall will accomplish much for the live stock industries of California, and will be glad to join in welcoming him to our State.
MILK FROM "CONTENTED COWS"
Every time we read the advertisement of a firm that is manufacturing and putting on the market a certain brand of condensed milk we are deeply impressed by the words "contented cows," a term invariably emphasized in its announcements.
How much those words imply! They almost make one wish to quaff a portion of this particular milk, even though it is canned goods. We see in our mind's eye a picture of those very cows, sleek and well-groomed, in green pastures with plenty of cool, pure water at hand; then we see them in clean, light and well-ventilated stables with an abundance of supplementary food; we see the attendants with kind words and gentle actions. All of these things are implied in the words, "contented cows," and we can not think of their milk as anything else than a product worth while.
And then comes to our mind recollections of many dairies where the comforts of the cows are given slight consideration—where but little more feed is given than is necessary to sustain life, let alone to produce milk; where the water tank often shows signs of stagnation; where the stabling accommodations are poor and

surroundings unsanitary; and where a cuff or kick, or a harsh word are not considered out of place.
Mr. Dairyman, are your cows "contented cows?" If they are not, you are not getting the returns from them that you should. The natural assumption is that "contented cows" are the best kind to keep, while practical dairymen have often demonstrated the fact beyond question.
NEED FOR ANOTHER CLASS.
One change in the premium list of the 1912 California State Fair seems to be the result of an oversight. In changing the draft horse classes there has been no provision made for farmers to show grade mares. We believe that it was a good move to bar grade stallions from competing for money prizes, and thereby lending encouragement to their breeding, but we also believe that a farmers' class should be provided which would admit the showing of grade mares. There are comparatively few farmers who own purebred mares, and there are many who have grade mares and are breeding to purebred stallions. These should be encouraged by the State Fair officials and suitable prizes provided for them. As the premium list stands now no animal in the draft horse classes is eligible to entry unless a registered purebred. We suggest that next year a class be provided for grade mares and mares with foal, thereby giving the average farmer an opportunity to show what he is accomplishing in the way of grading up.
Many cows choke to death every year, when, with a little experience, farmers could save them. Often they will choke on a potato or an apple or a similar object. A piece of one-inch hose six feet long may be pushed down the cow's throat, down her gullet and then made to shove the foreign object into her stomach. Sometimes oil is poured through the tube as a lubricant. For a visible choke the arm may be run down the throat until the object is reached and pulled out. Lard or oil is sometimes used to grease the throat and make it possible to work the object up to the mouth. Never try to shove a visible choke down.
BARB WIRE WOUNDS.
More good horses have been ruined or blemished from the introduction of barb wire than from any other cause. When a horse gets his foot over a wire, instead of trying to avoid injury to the leg, the animal will struggle violently. The wounds made by barb wire are always infected, so that healing takes place by the formation of granulation tissue. This being the case, the wound sometimes heals too fast and a large tumor forms. The skin cannot grow over this tumor, and a raw, bleeding surface remains. The common locations of barb wire cuts are in front of the hock joint, below the fetlock, along the cannon bone and across the breast. Wire cuts in front of the hock joint are often very serious, the wound usually extending through the tendons and into the joint. In treating a wire cut, the wound should be kept absolutely clean and exposed to the air and sunshine. When the wound starts to heal, it should not be irritated by washing the raw surface or by removing scabs which have formed. Liquid disinfectants are best applied by allowing the fluid to be poured onto the raw surface, not by rubbing the wound with cotton saturated with the disinfectant. Follow this disinfection by covering the wound with some good healing powder that is both astringent and disinfectant. Should the wound heal too fast, use some form of caustic to remove the excessive granulation tissue.—
Prof. C. L. Barnes.

THE LIVE STOCK and DAIRY JOURNAL

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SACRAMENTO, JULY, 1912

Number 7

Origin, History and Development of Aberdeen-Angus Cattle

(Written for The Live Stock and Dairy Journal by Charles Gray, Secretary
Aberdeen-Angus Breeders' Association.)

While the researches of naturalists have clearly shown that the original wild types of cattle were horned, it is none the less true that polled cattle have existed in Scotland for a time beyond the memory of man.

The Aberdeen-Angus breed derives its name from the countries of Aberdeen and Angus. The former county is at present one of the largest in the northeast of Scotland, while the latter name or term "Angus" has become obsolete as far as the name of a county is concerned, and the territory formerly known as Angus is now chiefly comprised in the county of shire of Forfar.

Due to the fact the breeders in Aberdeenshire claimed priority in the origin and development of the breed, they insisted that the breed should be named Aberdeen, and the breeders of Angus being equally confident the breed originated in Angus, refused to ignore the term "Angus" in naming the polled cattle of their shire, thus a compromise was attained whereby both terms were used with a hyphen, to the entire satisfaction of all breeders interested.

The origin of the breed is lost in the mists of antiquity. Until recently it has been conceded by Aberdeen-Angus historians that 1752 is the date that mention was first made of the present day Aberdeen-Angus cattle. A few, however, claim by figures that the Watsons bred Aberdeen-Angus prior to this date. Although most of the dates are of a speculative nature it has recently been discovered that Aberdeen-Angus existed in the county of Aberdeen four hundred years ago, because in Volume III, page 344 of the Spalding Club Antiquities of the Shires of Aberdeen and Banff in the year 1523, mention is made of polled cattle. This specific mention and date establishes beyond question that the present day Aberdeen-Angus, or their immediate domestic ancestors, existed in the northeast of Scotland. All other dates prior to 1523 in regard to the origin and existence of the Aberdeen-Angus breed of cattle naturally must be recognized as mere conjectures.

The average cattlemen or those interested in the cattle industry are not very much concerned about the ancient history of the domestic breeds of cattle, thus it is not deemed necessary to give more than the points that seem necessary to link the features of importance of the past hundred years to the present conditions as we find them in the United States today. Prior to the union of England and Scotland in the year 1707, there had been no incentive for farmers to breed cattle, but soon after the two countries united during the Queen Anne wars much encouragement grew out of the advance in the price of beef. Beef eaters were in the minority from 150 to 200 years ago, and beef sold so cheap that prices cannot be intelligently compared with present day prices or those of recent years.

Although the dates just mentioned clearly show that Aberdeen-Angus

have existed in Scotland and chiefly in the northeast counties for several centuries there is scarcely, if any, definite data relative to their existence and culture prior to the closing years of the eighteenth century and the early part of the nineteenth. With the rapid growth of beef and meat eaters and the demand for a meat diet it was only a natural sequence of events that such investigators and geniuses as Bakewell, Collings Brothers, Bates, Booth, Cruickshank, Tomkins and Hugh Watson were developed among the ranks of the live stock breeders. To Bakewell belongs the honor of being the first scientific improver in the sense it is recognized today; to Collings Brothers, Bates, Booth and Cruickshank belong in general the honor of scientifically and

Mains of Kelly. As it has been stated, to Hugh Watson belongs the honor of the first systematic improvement of Aberdeen-Angus cattle, and to William McCombie of Tillyfour, Aberdeenshire, it can just as accurately be stated that he was the great deliverer of the breed and the man who systematically exploited the merits of it in its native habitat in Scotland and every other part of the British Isles and France. To the achievements of McCombie's exhibits, especially those phenomenal victories which he won at the Universal Exposition at Paris, France, in 1878, is attributed the unparalleled success which the breed immediately scored in America in the early 80's.

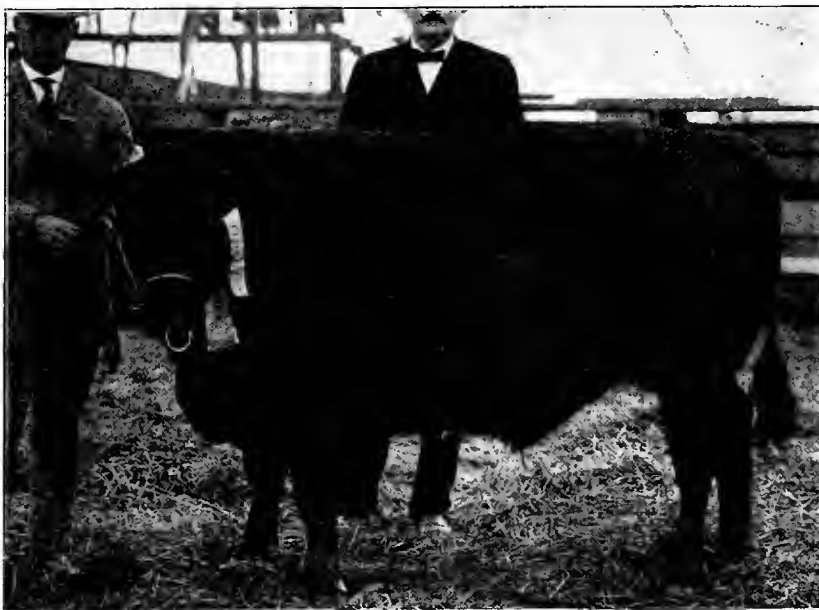
Many other breeders whose operations were simultaneous with those of McCombie's are worthy of mention,

fire which took place in the Highland and Agricultural Society's Museum in Edinburgh, and it was not until 1857, at the request of the principal breeders that collection of data for a herd book was again started, which constituted the contents of Volume 1 of the Scotch Herd Book which was published in 1862 by Edward Ravenscroft.

From 1862 and 1879 succeeding volumes of the herd book were edited and published by Edward Ravenscroft and Alex. Ramsey. During this period there was no well organized body of breeders in the form of a society or association. The year 1879 marks an important date in the history of Aberdeen-Angus because during that year Sir George Macpherson Grant took the initiative step in forming the Aberdeen-Angus Cattle Society of Scotland and permanently launching it. The benefits of the organization and its work, together with the united efforts of breeders can be accurately measured by the phenomenal spread of the breed to the United States, which took place during the early 80's.

In England the breed has been well established for many years, and the celebrated herds of Dr. Clement Stephenson, T. H. Bainbridge, J. H. Bridges, J. J. Cridlan, J. McIntyre and many others were worthy of mention have developed sensational champions for the fat and breeding classes of the leading shows in the past, including the London Smithfield Fat Stock Show, the Royal Show of England and Highland Society Show of Scotland, the leading shows for breeding animals of Great Britain.

In Ireland the breed has made an enviable record by its successful exhibits and adaptability. The history of the breed in Emerald's Isle dates back to its permanent introduction by Hugh Watson, who made it a point to exhibit his celebrated specimens and show herds at a very early date. At present many of the best herds on the British Isles are to be found in Ireland, and the popularity of the breed is constantly gaining. Although some of the first volumes of the herd book give evidence of the spread of the breed to New Zealand, Australia, France and Argentina, we find that the true merits of the breed as beef producers have only recently been appreciated by the South Americans. In fact, the breed has scarcely yet obtained a foothold in South America. However, one is safe in stating the breed has a bright future in Argentina and other South American cattle countries. It is simply a question of a systematic exploitation and education similar to what has taken place in North America to place the breed in the position it should occupy. In recent years the breed has been introduced into South Africa, and the results have been very satisfactory. The characteristic excellence of the breed in constitution, vigor, hardness and rapid maturing qualities, etc., have been found to be easily adaptable to the various conditions of the cattle countries of the world, and especially to the corn belt feed lots and ranges



BOOTHROYD.

A Grand Champion Angus Fat Steer. Fed and Exhibited by H. W. Moore, Colorado.

systematically establishing the improvement in the Shorthorn cattle; to Tomkins the Hereford improvement is due, while by general consent the distinguished honor of the first scientific improvement of Aberdeen-Angus belongs to Hugh Watson of Keillor, Forfarshire, Scotland.

Hugh Watson began his operations in the year 1808, or about the time the Collings Brothers had reached their zenith in Shorthorn ranks. In the progress of Mr. Watson's career he exhibited the breed extensively in Scotland, England, Ireland and France, and gained more than five hundred prizes and was instrumental in successfully introducing the breed into the countries in which he exhibited. Contemporaneous with Hugh Watson several leading agriculturists practiced cattle breeding along scientific lines, two of which are especially worthy of mention, viz., Mr. Fullerton, Ardstie and Malnes of Ardovie and Mr. Bowle,

but space is here too limited, thus it is not deemed necessary or of any value to make mention of any other breeders or herds except the Ballindalloch herd, which has the renowned reputation of being one of the oldest. It attained its high degree of excellence under the direct personal attention of its owner, the late Sir George Macpherson Grant, the latter part of the last century, and it is very gratifying to learn its present owner, Sir John Macpherson Grant, has enthusiastically taken up the work of his father with the purpose in view of making still greater improvements in his herd in particular and the Aberdeen-Angus breed in general.

About 1840 breeders began to see the necessity of keeping the breed pure, and at the same time the systematic gathering of data on pedigrees and breeding was started. Unfortunately all data that was collected prior to 1851 was destroyed by the

The I. H. C. and the Anti-Trust Law

Cyrus H. McCormick, President of the International Harvester Company, has issued the following statement concerning the suits it is now defending on charges of violating the Sherman law:

"The International Harvester case differs radically in its facts from all the so-called 'trust' cases heretofore decided under the Sherman law. The International Harvester Company was organized in 1902 for the purpose of securing economy in the manufacture and sale of harvesting machinery, and of increasing the foreign trade. It had no water in its capitalization, and it has earned only a reasonable return on its capital—less than 7 per cent per annum on the average. The prices of its machines are now substantially the same as in 1902, notwithstanding an increase of 15 per cent in raw material prices and 30 per cent in wages. The company has caused a large saving to American farmers in the cost of agricultural implements. It has increased the foreign trade in agricultural implements fourfold in nine years; its foreign sales in 1911 were over \$42,000,000. It has not sold cheaper abroad than at home. Its treatment of its customers, its employees, its agents and its competitors has been in accord with the highest standard of ethics and honorable business methods. To the farmer it has given better service and better machines; to agents and dealers a less hazardous and fluctuating business;

that the International Harvester Company has not used its power to oppress or injure the farmers who are its customers."

And again:

"The price of harvesting machines has not increased in proportion to the increased cost of construction or the increased merit of the machines, and respondent has brought other farm implements into trade."

"The evidence also shows that the machines manufactured by the International Harvester Company have been greatly improved in quality and the item of repair material has been reduced in price and placed within closer reach of the farmer."

"The organizers of this company acted under the advice of able counsel, and in the sincere belief that they were violating no law. If under later decisions it should be held that the law was violated, it could only be through the creation of a power to oppress which has never been exercised."

"More than six years ago the company asked for its investigation by the United States Government, and opened all its books and records for inspection, and furnished all information requested. No suggestion of any change in its business methods has been made to it by the Government at any time. Recently, a frank and full discussion of the whole situation has been had between the representatives of the Government and the company, in an honest desire upon both sides to avoid litigation. Some plan may yet be found which will obviate the necessity of any protracted litigation by satisfying the claims made under the Sherman Act without seriously impairing the economic advantage and benefits secured by the organization of this company. No form of reorganization, however, was suggested by the Government which seemed practically possible."

"The Government has been careful to avoid embarrassment to the foreign business from the litigation; the bill makes no attack upon and seeks no change in, the export business of the company. The filing of the bill will in no way interfere with the company's carrying on its business the same as heretofore."

R. M. Dunlap writes that the Simon Newman Herefords are doing splendidly, and that there is a continued strong demand for mature bulls. He hopes to show some good ones at the State Fair. Leave it to Dunlap to lead out the good stuff. He knows how.

In looking over recent reports of receipts at Portland union stock yards we note that during April there was received from California the following: 191 head of cattle, 3 calves, 1499 sheep, 14 horses. In May: 297 head of cattle, 65 calves, 91 hogs, 600 sheep and 4 horses.



An Aberdeen-Angus Product of Texas and Oklahoma. Grand Champion Carload of Fat Steers at National Feeders' and Breeders' Show, Fort Worth, Tex. Fed and Exhibited by H. B. Johnson.

of the United States. The history of Aberdeen-Angus in the United States forms the most interesting chapter of the breed.

The introduction of the breed into the United States and Canada is of comparatively recent date. In 1873 George Grant of Victoria, Kas., imported three bulls, and during the remaining years of the 70's, several other enterprising cattlemen made importations to Canada and the United States. It was not until the early 80's, immediately following the sensational victories of William McCormick, Sir George Macpherson Grant and other breeders at Paris, France, in 1878 that the merits of the breed became universal, and gave rise to a stream of invasion, as it were, of Aberdeen-Angus which permanently established the breed in North America.

It has been estimated that from 1880 to 1883 over two thousand Aberdeen-Angus were brought to the United States and Canada. The breeders who were instrumental in permanently establishing the breed in America by their importations and exploitations of the breed's merits by exhibiting are as follows: F. B. Redfield, A. B. Matthews, Messrs. Anderson & Findlay, Messrs. Gndgell & Simpson, T. W. Harvey, John S. Goodwin, J. V. Farwell, Mossom Boyd, Hon. J. H. Pope, Hon. M. H. Cochrane, Geary Brothers, G. W. Henry, etc.

To the late T. W. Harvey of Turlington, Neb., belongs the honor of systematically exploiting the merits of the breed. He was fortunate enough to secure the services of the late William Watson, a son of Hugh Watson, the first improver of the breed in Scotland, to superintend his breeding operations. As early as 1884 the Turlington herd won the coveted honors of grand championships over all breeds at the Nebraska State Fair, and later at the World's Columbian Exposition, Chicago, products of the Turlington herd won the highest grand champion honors over all breeds in the female classes.

The triumphant official birth of the breed should naturally be given as 1883, because that is the year the breed became permanently established in America and the year which the American Aberdeen-Angus Breeders' Association was organized. Much more could be said about the good work the Association has done in stimulating interest in the breed, and the material assistance it has afforded in accomplishing the unique achievements the breed has to its credit. However, space is too limited to permit

a detailed report. Suffice it to say, from a few scattered breeders who formed the organization in 1883, the Association has grown to astounding magnitude, and now has a membership of over 2500, and a list of 10,000 to 15,000 non-members who have transacted cash business or had some animals transferred to them during the



Sirloin Cut From Grand Champion Aberdeen-Angus Steer.

past two years. Over 160,000 purebred Aberdeen-Angus have been recorded in the American herd book.

While there have been pessimistic views expressed in the past about the future of the strictly beef animals and boycotts instigated to satisfy the minds of the would-be authorities or fanatics on beef industry, it is nevertheless a fact that the beef producers of the country are at present more optimistic and confident there is a much brighter future at hand for the beef producers. It is conceded by leading authorities on national and international affairs that the American people are destined to be great, and that they will naturally lead a strenuous life of labor to improve their positions. Thus it is logical to state that Americans will require diets of meat because no other food possesses energy in such suitable quantities as beef or other meats. The part the Aberdeen-Angus breed will play in the production of beef in the future will naturally be a star one, because the breed has been improved for strictly beef purposes and can justly claim the honor of being the premier beef breed of the world.

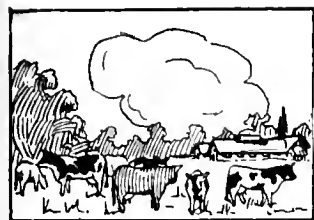
and to its employees it has given higher wages, improved and sanitary working conditions, insurance against sickness, accident and old age, and a share in its profits.

"The charges of misconduct found in the bill have been met and disproved by the company in other cases, and they will again fail, because they are untrue. The Supreme Court of Missouri, in a suit in which these charges were fully gone into, said:

"On the whole, the evidence shows



Rounds From Grand Champion Aberdeen-Angus Steer.



THE DAIRY



Dairying as a Vocation

(Written for The Live Stock and Dairy Journal by T. J. Gilkerson.)

The primary object a man has in going into the dairy business is usually, of course, the financial returns. However, I believe that this can be truthfully said of any business, because we do not have to be thrown out into this world long before we find out how essential our financial success really is. The "almighty dollar" is a very important feature in any business, and must be considered first, but aside from this there has always seemed to be an attractiveness about the dairy business to me. The confession of this fact has, however, won me many a critical smile. The story usually is that there are plenty of easier ways to make a living, and, of course, if you are looking for a snap and merely want to get through life the easiest way possible you should stay away from the dairy. If, on the other hand, you want to engage in a clean, honest, upright business that will afford you, not only a means of securing a livelihood, but also a way to be of service to your fellow men and gain much pleasure in doing so, you should not hesitate about choosing dairying as your vocation.

Malcom H. Gardner says that most men get a vast amount of pleasure from the ownership of fine animals, but I should say that they get vastly more pleasure and satisfaction from breeding and developing them.

W. J. Gillet once expressed himself thus in regard to his success with Colantha 4th's Johanna: "The pleasure and satisfaction which I have derived from being able to bring out a cow of my own breeding and development that has beaten the world's finest and greatest is worth more to me than all the money I have or ever will have."

Such pleasure is by no means confined to the production of record breakers or even to the breeding of purebred animals, but it is the pleasure of success in your undertakings, the fact that you are gradually increasing the producing capacity of your herd and thereby the returns from them, and you can't help but grow to having quite a liking for the animals that are always helping you toward this end.

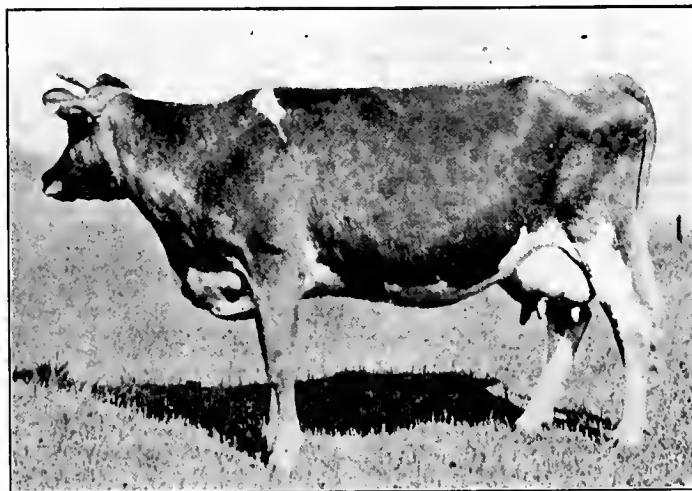
Many men are inclined to consider dairying as a narrow business with very little to it. They are looking for a wider field of usefulness or work that looks more like they were doing something, but the mistake they make is that they have not learned enough about it to know how large a field it really is. Many old dairymen who have spent the better part of their lives in the work, as well as beginners, do not see the inside of the dairy business. An old dairymen told me not long ago that it had taken him most of his lifetime to learn that he might just as well be raising good cattle as poor ones, but he isn't too old to learn, for he has made a start in the right direction by purchasing a well bred calf to head his herd. He is now filled with a boyish enthusiasm in regard to the breeding of fine cattle, and why shouldn't he be? Is there anything that would give him more pleasure in his old age? Is there any reason why he shouldn't

pursue his line of work as long as he is able to do anything, and finally could he leave a better monument for himself than a fine herd of cattle?

I say dairying as a vocation. How often do we hear it spoken of in this way? Not often enough, I am sure, for what vocation is in any way better. If the man who grows two blades of grass where but one grew before is a public benefactor, then he who, in addition to this, makes each of these blades produce twice as much butter-fat must be twice a benefactor to mankind. People should come to seeing the dairy business more in this light, and thus put it on a better and higher basis. If dairying could come to being considered more as a life work and a vocation there would probably be fewer mistakes made in the business. Most of the dairymen who have gotten sick of their business are

that makes a success. There are so many details to attend to about a properly managed dairy that unless one can get some enjoyment out of the work I should predict that his chances of staying with it and making a success of it would be rather slim. One should know before he starts in whether such an occupation will agree with his makeup or not, and if not he should cast a different lot in life because after you are once launched in this line of work it should be a permanent thing.

Start out right with as good an understanding of what you are going into as possible, and then make up your mind to make it your vocation. Be a specialist along your line, and the more you learn about it the more you will find there is to learn. If you are already in the dairy business or feel that you want to get into it, don't let



Clementine Mabel. Guernsey Owned by Bella Vista Stock Ranch, Martinez, Cal. First Month in Milk Made 1359.9 Pounds Milk and Nearly 58 Pounds Butter-Fat.

those who have jumped at the idea that there is big money in dairying, and that it is an easy business to manage. It is easy enough for them to look at a well equipped dairy with a fine herd of producers and see the beauty as well as the profit of it, but it is hard for them to realize that the possessor of this dairy has probably had this goal in mind for a number of years and has had to live through many ups and downs as well as many years of patient struggle to get to where he is at the present time. The beginner should realize that all things worth while usually come slowly and start out realizing that he either must have a full purse or else take time to build up a herd of producers before he can expect the best returns.

The ideal dairymen, or at least the one I like to consider as the ideal dairymen and the one whose knowledge we can not help but respect, is the one who has spent years of his life struggling from the bottom up, one who has learned from experience and study how to make his dairy pay. It is the rule, I believe, that it is the man who enjoys his dairy and enjoys building it up and improving his herd

anyone persuade you that there is any better vocation for you, and do not feel that you necessarily have to be a capitalist to do it, either, but get started right and keep going, always building up the herd and increasing the productivity of your ranch.

If you want a home and a business that your wife and children can enjoy, take the dairy and give it your best efforts mentally and physically, and you will be able to be proud of your vocation and the part you are playing in the great work of the universe.

A cow's cud is simply any coarse food she may eat, like hay, grass, corn fodder or straw. When she first takes it into her mouth she chews it and moistens it with saliva just enough so that she can swallow it. Then later she raises it in mouthfuls she swallowed it in and rechews it, and it then goes direct to the second and third compartments of her stomach. Her cud is no more nor less than the coarse food she eats. When she eats no coarse food of course she has no cud to chew.

WHAT THE CALIFORNIA DAIRYMAN MAY ACCOMPLISH BY KEEPING INDIVIDUAL RECORDS.

The Live Stock and Dairy Journal—
Splendid results have been obtained through the cow testing associations in nearly every state, and I have yet to learn of one failure where the work was properly conducted. Yet there are many herds that are out of the reach of these associations, and as many more men who are running large dairies and who wouldn't give 2 cents to belong to one. I know of no business that is so loosely conducted, as a whole, as is the dairy business.

In every other branch of commerce a man who buys an article to sell again figures on a certain per cent profit on that article, while in the dairy business a man pays \$100 for a cow, puts her in with ninety-nine other cows and there loses sight of her entirely.

While I am strongly in favor of the cow testing associations, under the existing circumstances, you will agree with me that there would be no need of them if dairymen were business men.

There are many conditions that affect the dairy, and different methods are required in different localities, but the business principles are nearly always the same.

Through individual records the dairymen not only learns that he must cull out his poor cows, but he also learns the requirements of his producers. If he is keeping daily records he learns that the cow needs shelter during bad storms the same in California as in Wisconsin. He learns that his cows need a balanced ration, and that it is necessary to grow corn, kale or mangles in order to supply the carbohydrates in which alfalfa is deficient.

Last, but not least, he learns the essential point of keeping his herd up to a full flow of milk, instead of letting them go down for the want of feed, thinking he can bring them up again when the next crop comes on. That is a mistake. Many a good cow has been condemned for the want of proper handling. If a man is sufficiently posted he will find that many times he can use a small grain ration at an enormous profit among his best producers.

Our market shows that a large majority of the dairymen are like a sea captain in a sailing vessel. They sail when the sailing is good. They depend too largely on a large pasture with a pool of stagnant water in it, and then condemn their cows because they are not producing as they should.

When I came to California I was told by some of the leading dairymen that they couldn't afford to keep individual records on account of high wages, and that most of these high wage earners were not competent to weigh a cow's milk and set it down on paper. I visited a number of large Holstein dairies that were supposed to be sanitary, and found that they were using wet hand milkers and also that their cows were producing less than two gallons of milk per cow a day, notwithstanding that they were feeding a grain ration and had many large producers in their herd. It was evident to me that a large number of

HOLSTEINS

Two Hundred Purebred, Registered Cows, Heifers, Bull Calves.

We are offering for sale Cows and Heifers that will give from eight to twelve thousand pounds of milk per year. Many of them bred to our two great herd bulls, Sir Netherland Cornucopia and Prince Hengerveld Segis. The four nearest dams of these two great bulls average over 600 pounds of milk, 30 pounds of butter, 4 per cent fat, official records, for seven days. Conceded to be the two greatest hulls owned by any farm in the Middle West. Bull calves sired by these great bulls, some of them out of record cows.

Write us. Let us tell you more about this great herd. Quality considered, we price them right and guarantee every animal to be as represented.

WOODLAWN FARM
Sterling, Illinois

J. H. HARLAN CO.

WOODLAND, CAL.

HOLSTEINS

Nothing to sell now, but we are booking orders for calves for future delivery.

Offerings all Sold

REGISTERED HOLSTEINS.

Orders taken for bull calves to be born of A. R. O. dams. Heavy milking strains with high average per cent fat.

LINWOOD FARM,
Santa Cruz, Cal.

Purebred Registered
HOLSTEIN CATTLE
The Greatest Dairy Breed
Send for FREE Illustrated Booklet
Holstein-Friesian Assn., Box 165, Brattleboro, Vt.

N. E. NEILSEN

VETERINARIAN

Sacramento, California
Office and Modern Hospital—Thirteenth St. bet
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Dairy Cows For Sale

Free from tuberculosis. Official test certificate with each cow.

I sell these cows singly or in car lots.

C. P. STANBROUGH, D. V. S.,
Patterson, California.

SHORTHORNS

20 Head of Service Bulls

For Sale

MILK STRAIN

Attention Dairymen!

I am breeding the finest stock in the West. Young bulls for sale—all pure-breds. Write for prices and pedigrees.

JOHN LYNCH,
Petaluma, Cal.

Holstein-Friesian Cattle

A Few Choice Registered Bulls and
25 Choice Registered Heifers.
Prices on Application.

CHAS. JAY WELCH, Los Banos, Cal.

these cows weren't even paying for the milking, to say nothing of the feed they were getting.

When I took charge of a dairy where we were milking 150 cows I decided to adopt my former methods, and so established scales and weigh sheets in each string. I find that weighing is as successfully conducted in California as elsewhere.

I give the milkers each a string of twenty-five cows in the place of thirty, but these are milking cows, not strippers, and I know positively that each cow is paying a dividend. I hire nothing but good, clean men, and I have no trouble in finding them. I have had only one change in the last three months, and it looks now as though my men were well established for the summer.

Most dairymen are trying too hard to save a dollar by doing work that they could hire a common day laborer to do, instead of making two dollars by looking after and conducting their business properly.

I saw an advertisement in a California dairy paper. "Foreman wanted to take charge of a large dairy and milk a string of cows." When the advertiser secured his man I will venture to say he got a milker and nothing more—a man whose only ambition was to get through with his work the quickest and easiest way possible, regardless of the results.

It is true that a dairyman many times has of necessity to milk a string of cows, but any man running a dairy of one hundred cows or more can't well afford to handle another man's job outside of his own, that is, if he is handling the dairy to the best interests of himself or his employer. He will find that he has all he can attend to for fifteen to eighteen hours every day.

When a man in California, the State of wonderful resources, where it is possible to grow green feed the year around, tells me that his dairy is not paying, I can see nothing else to lay it to but poor management.

G. L. STEARNS,
Tehama County, Cal.

SPEECH DELIVERED AT MEETING OF TULARE DAIRYMEN'S ASSOCIATION.

(By F. W. Andreasen.)

The success of a dairyman depends greatly upon himself or the man in charge of the dairy. He should be a

man who loves cattle, and especially milk cows. A dog may love his master no matter how cruelly he is treated, but a cow will not. If she is of a good disposition she will meet your kindness with affection and materially increase her production of milk. It is natural that the cow should give her milk to some one she likes, and it is a proven fact that she will give, not only more but also better milk, to the one she likes than to the one she does not like. One example of this was where two good milkers were each given a string of cows to milk. The two strings were selected so that they contained the same number of cows, and each string of cows had been known to yield the same amount of milk and butter-fat. But it was found that one of the milkers got a little more and richer milk from his string than the other, and when they exchanged strings the same man got a little more and richer milk from that string. Another instance was when the Kansas Experiment Station selected a herd of twenty common scrub cows, which were below the average cows of the state, but by proper feeding and kind treatment these twenty cows were made to yield during the year an average of 238 pounds of butter-fat to the cow, while eighty-two herds of scrub cows through the state only averaged 104½ pounds to the cow. The writer making the report said:

"Our scrub cows were petted, comfortably sheltered, never driven faster than a slow walk and never spoken to in an unkind tone."

To get good results from the cows they must also have plenty of good food and water, and be properly sheltered during cold and stormy weather. Short rations or lack of water during one day may materially diminish their yearly output. After we have done our part by providing kind treatment, plenty of good food and water and good shelter it becomes necessary to investigate whether each individual cow is doing her part.

The dairyman should not be afraid to use his pencil. He should keep a journal in which he should note down the time when each cow is expected to freshen, the sire of the calf she is expected to drop, the kind and amount of food fed and the effect of such food upon the cows. But above all he should keep a record of the yearly production of each cow so that he can dispose of those that are not profit-

able. It has been demonstrated by the records kept by many of the experiment stations of this country, that a great many cows are kept at a loss, and that a great many more are just barely yielding enough milk and butter-fat to pay for their feed and care. In the records of a herd of ten cows belonging to a dairyman in Idaho, the Experiment Station of that state reports as follows:

Five of the best cows returned a profit of \$36.34 each, while the five poorest only returned a profit of \$7.12 each. If the dairyman had disposed of the five poorest cows and only kept the five best he would not have lost much. If he could have procured one more cow like the five best and kept six good cows that year, then he would have made a little larger profit from the six cows than he did from the ten. Where the experiment stations have tested out the private herds it has been found again and again that the profit from the herd has been derived from one-half or three-fourths of the cows. A gentleman who was President of a Dairy Association and considered an excellent dairyman had a splendid herd of cows. He thought that he knew them so well and was sure that there was not a poor cow among them, but because it had been so strongly recommended that every one should keep yearly records of their cows he thought that he would try. Before he started he thought that it would be a good idea if he and his son put down a list of the names of all their cows and rate them as they thought that they would rank. The cows were rated first, second, third, etc. After the year's test it was found that the cow rated first by him and his son was only the sixth best, and the one rated fourth by them proved to be the best cow in the herd. It was also found that there were several cows that had not been yielding enough butter-fat to pay for their feed.

The Tennessee Station made a study of 298 cows. One of these cows produced about 411 pounds of fat. Her feed cost about \$37, which made the cost for feed per pound of fat 9 cents. The poorest cow produced about 65 1/3 pounds of fat, equal to about 78 pounds of butter. If the cost of feeding that cow was the same, every pound of butter-fat would cost over 56 cents. The best cow was not so extraordinary. There are cows that yield more than three times that



A Madera County, Cal., Dairy. One of the Fast Developing Dairy Sections of the San Joaquin Valley.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

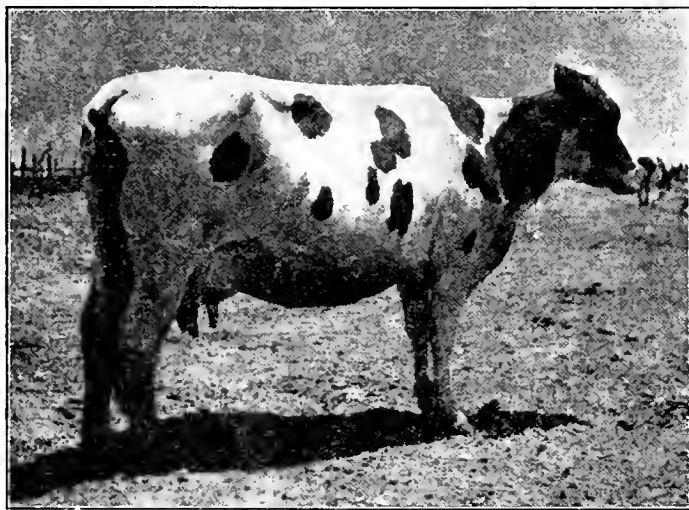
amount, and there are also many cows that give as little as 65 1/3 pounds of butter-fat through the season. Hundreds of similar experiments could be cited where the owners, to their surprise, had found that they had been keeping some cows that did not even pay for their feed.

Let us now see what a cow should yield to return a profit. If you wish to have plenty of feed for your cows and raise the hay and feed for them yourself, then I think you will need about one and one-half acres of land for each cow. If you pay \$15 per acre rent and \$2.50 for water, then it will cost you \$26.25 a year for feed for each cow. Add interest on the money invested in the cows, \$3; depreciation in the value of the cows, \$1.75, and each year foots up to \$31. If a man milks twenty cows and helps to cut and cure the hay, plant and weed roots and other feed necessary for the cows and assists with other work connected with handling them and their product, then his wages and board should be charged against the twenty cows. Wages for ten months at \$40 a month comes to \$400, and board for ten months at \$18 per month would come to \$180, making a total of \$580 for the ten months. Divide this by 20 and it will show that it costs about \$29 a year to milk a cow and handle her

seen the time when butter-fat was only worth from 11 to 12 cents, and averaged only about 20 cents for the whole year's output. Those bad prices followed years when the prices had been as high and possibly higher than they have been in late years. A man can not succeed if he changes from dairying to farming and then back to dairying every time the price changes. Therefore he must aim to make cost of production as low as possible, so that he can make both ends meet through a year of low price. The greatest factor in reducing cost of production is improving the herd.

How Can the Herd Be Improved?

First you must decide upon what breed of dairy cattle will be best suited for your business. Then secure a purebred bull of the best milk producing strain you can afford, and raise the heifer calves from your best cows. To ascertain which of your cows are the best, if you have not already kept their records, you should weigh the milk from each cow for one or two days each month and have the milk tested so as to know how much butter-fat she has produced each month of the year. If she has not returned any profit, then there is not any use of retaining her in the herd. If you have young cows you must make room for, then you can easily dispose of



Colantha Juliana of Riverside (93953). Owned by B. F. Anderson, Modesto, Cal.

product. This makes the cost of feeding and milking \$60 a year for each cow. If she yields 200 pounds of butter-fat a year and you receive an average of 30 cents per pound, then she has paid the cost of keeping and you have the skim milk and her calf as profit. If she has through the season given 5000 pounds of milk you have 4000 pounds of skim milk. At 15 cents per hundred it is worth \$6. If the calf is a heifer from a cow producing more than 200 pounds of butter-fat a year and the daughter of a thoroughbred bull, then she may be worth considerable. If the calf is a scrub she is worth nothing. A bull calf is not worth anything unless he is from thoroughbred parents. I heard Mr. Rawl, Chief of the United States Dairy Division, say that he wished a law would be passed providing that all scrub and graded bulls should be killed, and I think that such a law would be beneficial to the dairy industry. If these figures are correct it is plain that no cow yielding less than 200 pounds of butter-fat through the year should be kept. It is also plain that a cow yielding only 100 pounds a year does hardly pay for her feed, and is therefore kept at a great loss. We must also be prepared to produce the butter-fat for less than 30 cents. For if an occasional year should bring lower prices, then we should be prepared to meet it. I have

those that are the least profitable. The best way to keep records of the production of each cow has been found to be by forming cow testing associations. If there are twenty-five to thirty owners within a radius of a few miles a man is employed to visit one dairy each day of the month and weigh the milk from each cow, both in the evening and in the morning, and make the test and record it through the day. If two neighbors have only small herds and one is in the habit of milking early and the other late, then it is possible for the tester to make records of the two herds in one day, and so can attend to more than thirty herds. If the herds average forty cows, a man can take care of 1200 cows, and \$1 per cow would make him good wages. The association provides a scale on which the pointer can be moved and fastened so that it points to zero when the empty pail is hung on it. The dial of the scale is graduated to pounds and tenths of pounds. It also provides a Babcock tester with glassware of the most highly approved kind, and each member furnishes the necessary book for his herd. The forms of these books and the suggestions for constitution and by-laws can be obtained from the Agricultural Department of the University of California, or from the State Dairy Bureau, or from the United States Department of Agricul-



HOLSTEINS

Purebred, Registered Bull Calves, sired by Acme Pontiac and Salambo Captain Riverside, and out of my Best Cows. Pedigrees and Prices on application.

J. W. BENOIT, R. 2, Modesto, Cal.



BREEDERS AND DAIRYMEN!

JERSEYS

I have the best blooded stock in this country. If you wish heifers and bull calves, I am in position to supply you. Purebreds only.

GERALD D. HILLIER,

Modesto,

California.

2 Carloads of Good, Young Dairy Cows

For sale, which have all passed the tuberculin test. For information apply to

A. BALFOUR

350 CALIFORNIA STREET,

SAN FRANCISCO.

HOLSTEIN BULLS FOR SALE

PENNANT DAIRY

Four Bulls bred in milk and butter lines, ready for service. Are from tested dams and by the best bred sires in the East. Will sell you one at price that dairy-men can pay.

Write for extended pedigree and prices.

Live Stock Importers and Breeders of Purebred Holsteins.

HEENAN & WELDON

P. O. Box 365, Sacramento, Cal.

HOLSTEIN-FRIESIANS

WOODCROFT FARM, PUEBLO, COLORADO.

Offers for sale a 3-year-old son of Pontiac Korndyke, and eight sons, 4 to 16 months, from A. R. O. dams. Also five A. R. O. cows and five yearling heifers bred to him.



Attention Breeders and Dairymen!

Are you in need of a herd sire? We are offering the choicest lot of

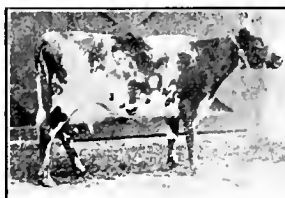
Holstein-Friesian Bulls

Ever offered in the State. Several Eastern bulls sired by Korndyke Queen De Kol's Prince, the sire of four daughters that average 30.22 pounds of butter in 7 days, and one with 1990 pounds of butter in one year. Also have a few bull calves by our herd sire, King Segis Pontiac Emperor, who is a grandson of Pontiac Clothilde De Kol 2d, and his dam a full sister of King of the Pontiacs. Will have some cows and heifers for sale later.

A. W. MORRIS & SONS

Woodland

California



DAIRYMEN ATTENTION!

We can supply you with

Ayrshires

Best blood in the West. Bulls, cows, heifers and calves. Our service bulls were sired by Grand Champions. Write for pedigrees and prices.

BROWN & BRANDON,

Petaluma,

California.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

ture. Each member usually furnishes board and lodging while the man is at his place, and takes him and his apparatus to the next place.

The first cow testing association was started in Denmark in 1895, and so beneficial was it found that at the end of nine years 330 were in operation in that little country, which is only one-tenth the size of California. After some associations had been in operation five or six years it was found that their cows had about doubled their production, and in some cases much more than doubled it, and since that time every dairy country in the world has urged their dairymen to start a similar association. And where there are not sufficient cows in the locality so that a man can be employed, then they urge that each dairyman should get his own outfit. The dairyman should get a scale as described before and such as I have here. You can adjust the movable pointer so that when the empty pail is suspended the pointer will indicate zero. If one pail is a little lighter than the others you can tie something to the bail for that day so that they are all of the same weight, then the movable pointer will indicate the exact weight of the milk and there is not so much chance of an error as there would be if you had to subtract the weight of the pail. Such a scale, weighing as much as 30 pounds, costs \$3.50. If a lot of ten scales is bought it will cost only \$3 in San Francisco. A 60-pound scale costs \$4.50 for one, or \$4 each for a lot of ten. A good eight-bottle tester complete with glassware is listed at \$12, and can possibly be bought for a little less. The cow's milk should be weighed a short time after she has freshened and her milk has become normal. It should then be weighed each month, preferably about the middle of the month, for three successive days. The sum of the amount produced for three days multiplied by ten gives the amount produced for the month. If there are more or less than thirty days in the month, one-thirtieth can be added or subtracted. A little credit sheet could be kept for each cow. Suppose that her milk during the three days in May weighed 89 pounds, for the month it would be 890 pounds, plus 30 pounds. If you cannot get time to sample the milk the days you were weighing it, it could be done later. Samples should be taken each milking for two or three days during each month. A little bottle like the one on the table or smaller with a cover will be good to keep the samples in. A little preservative should be placed in each bottle. If you have no tester yourself they should be taken away to be tested. If it is much trouble to get the milk tested, samples could be taken from each cow's milk in the second, fourth and seventh month after calving and the three tests added. As for instance, 3.8, 4.2 and 4.9 adds up to 12.9, and this divided by 3 gives 4.3. If you multiply the year's production of milk by the average test obtained in this manner you will have approximately the amount of butter-fat produced by the cow through the year. When you add up the fat produced by all your cows, you can see how it compares with your return from the creamery. Allow some for the milk used by your family and a small loss in separating.

If you cannot get twenty-five or thirty neighbors to go in with you and start a cow testing association, go in with three or four and buy an outfit. If you cannot find neighbors progressive enough to do that, get the outfit and go to it yourself, then sell to your neighbors those cows that are returning you no profit.

Some of you gentlemen may argue that a man who is attending to his business should be able to know whether



Purebred Holstein Helpers. Owned by B. F. Anderson, Modesto, Cal.

er a cow is worth keeping or not by taking a look into the bucket once in a while. But there are cows giving 6 per cent milk and others giving only 2.2 per cent milk. Then there are cows giving a large stream and consequently the milker will have his pail half full of some foam (and that is the cow that the milker likes), while others will not cause the milk to foam much. Twelve pounds or one day's milk testing 2.2 makes only a little over $\frac{1}{4}$ pound of fat a day. Three hundred days would give 75 pounds. You lose a lot of money on such a cow every year. Now, as to the difference in cows, I think that you will admit that there are cows giving less than 75 pounds of butter-fat, equal to 93 pounds of butter, in a year, and I know that there are some giving over 1300 pounds in a year. I was asked by a gentleman the other day what I knew about the cow Sadie De Kol Burke, and he asked if I thought it was possible that she gave over 134 pounds of milk in one day. I told him that I was sure of it, since my son was sent by the University of California to make that test, and later it was verified by other students.

SUMMARY OF LAKE MILLS SALE

On May 1st and 2d, at Lake Mills, Wis., the fifth semi-annual sale of the Lake Mills Holstein Breeders' Consignment Sales Co. brought out a great collection of good individuals which were sold at good average prices. The highest average price was realized by John Erickson of Waupaca, Wis., with a consignment of six head, all of which stayed in Wisconsin. F. J. Bristol & Sons' Co., Oakfield, Wis., made a good average of \$232 on a consignment of twenty-eight head. Among Western breeders who secured some of the best offerings were T. J. Hastings, Rosalia, Wash., seven head; T. I. Atkinson, Woods Cross, Utah, four

head; Ancel Hatch, Woods Cross, Utah, five head.

In all 153 head were sold for \$26,845, an average of \$175 per head. The consignments and averages were as follows:

F. J. Bristol & Sons' Co., Oakfield, Wis., 28 head, average.....	\$232
Anthes Brothers, Ft. Atkinson, Wis., 7 head, average.....	162
M. Dermitt, Lake Mills, Wis., 10 head, average.....	135
F. B. Fargo, Lake Mills, Wis., 14 head, average.....	220
M. F. Peck & Son, Marshall, Wis., 11 head, average.....	181
Randall & Buedke, Watertown, Wis., 12 head, average.....	216
William Everson & Sons, Lake Mills, Wis., 14 head, average.....	141
S. C. Stanchfield, Fond du Lac, Wis., 9 head, average.....	130
W. H. Jones, Juneau, Wis., 3 head	146
Norwood Stock Farm Co., Lake Mills, Wis., 9 head, average.....	136
Albin Koppin, Waterloo, Wis., 10 head, average.....	104
John Erickson, Waupaca, Wis., 6 head, average.....	285
Charles F. Aldrich, Whetwater, Wis., 9 head, average.....	136
George H. Ackerman, Milwaukee, Wis., 11 head, average.....	124

KINGS COUNTY DAIRYMEN'S ASSOCIATION PASSES RESOLUTIONS REGARDING OLEOMARGARINE LEGISLATION.

The Live Stock and Dairy Journal— I herewith enclose you a copy of a resolution passed by the Kings County Dairymen's Association, which is self-explanatory. We thought you would probably like it for publication. We cannot fight the oleomargarine people too hard. Very respectfully,

C. A. STEPHENS, Sec'y.
Hanford, Cal. June 19, 1912.

"Whereas, It has come to the knowledge of the Kings County Dairymen's

Association of Kings County, Cal., that there is now pending before the House of Representatives of the United States at Washington, D. C., a certain bill known as the Lever or Burleson bill, and that there may be other bills of like nature proposed for passage, which, if passed, would remove the tax now existing upon oleomargarine; and,

"Whereas, We believe that the removal of said tax on oleomargarine would be inimical to the dairy interests of this county and of the whole San Joaquin Valley, and subjecting the dairy interests thereof to unfair and fraudulent competition and irreparable damage; and,

"Whereas, There are now engaged in the dairy business in Kings County more than 2000 people, and the gross annual receipts for dairy products in Kings County for the past year amounted to \$2,394,250, and that said dairy interest is constantly growing and multiplying, and that this Association represents said dairy interest of said persons and of said Kings County. Now, therefore, be it

"Resolved, By the Association that it does hereby protest against the removal of said tax upon oleomargarine, and does hereby request the Hon. J. C. Needham, Congressman from this district, to use all legitimate means in his power to prevent the removal of said tax."

I hereby certify the above and foregoing to be a full, true and correct copy of a resolution passed by the Board of Directors of the Kings County Dairymen's Association at a regular meeting thereof held at Hanford, Cal., on the 15th day of June, 1912.

C. A. STEPHENS.
Secretary of the Kings County Dairymen's Association.

THE MANURE SPREADER SOON PAYS FOR ITSELF

How many times on the farm does the accumulated pile of manure at the stables make itself unsightly and malodorous, at the same time losing some of its fertilizing strength by so standing. The mere accumulation the harder is the job of hauling and spreading it upon the land to which it belongs. The manure spreader is the thing to do away with much of the nuisance and unpleasantness of properly handling the manure. As one dairyman with whom we recently talked said: "My first manure spreader paid for itself in the first year, and now I am using two." And this man was induced to buy a spreader, not so much because he simply wanted to get the manure out of the way, but because he was running a dairy of 105 cows on an acreage so small that he was compelled to buy a great deal of feed. The manure spreader has been the means of greatly increasing the productiveness of his land, besides permitting him to keep the premises near his barns in a highly sanitary condition with a minimum of labor. In this issue of the Journal appears the advertisement of a spreading appliance sold by the Sacramento Implement Co. of Sacramento, Cal. Its substantial construction, combined with its low cost, makes it a most desirable spreader, and we advise our readers to get better acquainted with it.

The first two days of a chick's life should be spent in brooding, and no feed is required until they are at least forty-eight hours old. Nature has provided for a chick's first feed and all they need is quiet brooding.



Butter Making at California Polytechnic School, San Luis Obispo, Cal.

A Dairyman and Hog Raiser Tells of Some Things He Has Learned Through Costly Experience.

The Live Stock and Dairy Journal—This is just a trifle out of my line, but I have learned one or two things that might be of value to your readers.

Our place is eight miles northeast of Modesto. The ranch is made up of 300 acres of land, of which 140 are under irrigation in the Modesto irrigation district and sown to alfalfa. There are also 35 acres of alfalfa in the bottom, making in all about 175 acres in alfalfa. About 70 acres were cut for oat hay and produced a very good crop, considering the year.

The barns are framed out of 12x12 timbers and the hog pen out of 6x6. The buildings are located on a sand hill, so consequently during the rainy season there is no mud whatever around any of them. The dairy cows have about 60 acres to pasture on and the river to drink out of. Our purebred stock in the dairy line is limited to the herd bull and six purebred heifers, all Jerseys. The herd bull is Lillian's Sans Aloï (97763). His dam, Lillian of St. Cloud (195655). His sire, Sans Aloï (87012) (son of Financial Countess, 935 pounds 10 ounces butter in one year), with one exception, his own brother, the most intensely island bred Finance Interest bull living. Of the purebred heifers five were sired by Golden Fern of Rockland, a promising young bull that sold at auction for \$2000 recently. Golden Fern of Rockland was sired by Golden Fern's Lad P. 2160 H. C., sire of Flying Fox (sold in 1902 for \$7500), Emmet 2d (sold in 1905 for \$10,000), Sensational Fern (sold in 1907 for \$10,200 at 8 months of age). The dam of Golden Fern of Rockland is Rosy of Oaklands, A. J. C. C. 195,835, who took first prize at Grouville and St. Saviour's show, Island of Jersey, May, 1905. So you can readily see that while we are not

very heavily stocked with purebreds, what we have are good. Our cows are for the most part with their first calf. We are milking forty-one.

Something of interest to readers may be the common trouble of heifers failing to clean thoroughly. Whenever we find one that has not rid herself entirely of the afterbirth we take a funnel with a piece of about 3/4-inch rubber hose 4 feet long, insert about a foot of it, then fill the funnel with a medium strong solution of permanganate of potash and hold aloft until the funnel is empty, then refill until about one-half gallon is used. Continue this treatment night and morning until well. It will positively cure them. If after using the treatment a while part of the afterbirth protrudes, take hold of it and strain gently, and with the help of the cow it will come loose.

In our hog line our foundation stock consists of three Poland China sows and a boar, two Hampshire sows and a boar, two Berkshire sows and a boar, three O. I. C. sows and a boar—all purebreds and registered.

A valuable hint to hog raisers feeding skim milk is to never feed it sweet. Sour it always. Our experience in this line was costly. Sweet skim is very constipating, as we discovered after we had lost three fine young Poland Chinas, and another one had got the piles so badly that the affected part protruded at least two inches. For this one we took him off the milk diet altogether and put him on grain and alfalfa hay. We kept the affected part well greased, and it went back into place of its own accord. Such was our experience with sweet skim milk. And of all the papers I read I have never read of anyone advising souring the milk. I wean the young pigs at ten weeks, feeding them three times a day for a few weeks, giving them enough milk to keep them well filled up. In that way they don't miss the mother sow as much as if they were hungry part of the time.

Alfalfa hay is, I believe, one of the finest things available for young pigs and old ones as well, as it is washy, and I have found it is as good a regulator of the bowels as can be used.

I omitted a little bit of valuable advice in regard to dairying. Where alfalfa is seeded the first year, if sown early, there are a great many weeds come up with it. We had 100 acres of new alfalfa, and the weeds were very thick. When the alfalfa was up high enough to clip, we cut it and then salted and stacked the weeds, and the dry stock ate it just as well as hay, and it has saved us hundreds of dollars this year.

Hoping some of the above will prove helpful to the readers of The Live Stock and Dairy Journal, I am, an interested reader. JAS. WILLISON.

By R. Willison, Manager.
Stanislaus County, Cal.

What do You Need On the Dairy Farm? SUPPLIES?

We can furnish you what you require at the right prices. Write us for prices on anything you need in dairy supplies.

We are agents for Evergreen Cow Feed, the feed which supplies what alfalfa lacks as a milk producer.

J. N. BLAIR & CO.

1009-1011 Front St., Sacramento.

J. L. MCCARTHY

LIVE STOCK AND REAL ESTATE AUCTIONEER

Fifteen years experience at Chicago, St. Louis and Kansas City Stock Yards. Country sales a specialty. Address

Key Route Hotel
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WOODLAND, CAL.

BREEDER OF SHORTHORN CATTLE, POLAND CHINA HOGS, SHROPSHIRE SHEEP

T. B. GIBSON

Proprietor

DE LAVAL CREAM SEPARATORS

Best Time To Buy One

There never was a better, if indeed as good, a time to buy a DE LAVAL Cream Separator than right now.

The hot weather is at hand when the use of the cream separator frequently means most as to quantity and quality of product, while cream and butter prices are so very high that waste of quantity or poorness of quality means even more now than ever before.



This is likewise the season when DE LAVAL superiority is greatest over other separators,—in capacity, ease of running, sanitary cleanliness and every other way.

Cost need not be a consideration because a DE LAVAL cream separator is not only the best of all farm investments but may be bought either for cash or on such liberal terms as to actually pay for itself.

There never was a better time than right now to buy a cream separator and there can be no possible excuse for any man having use for a separator delaying the purchase of one at this time.

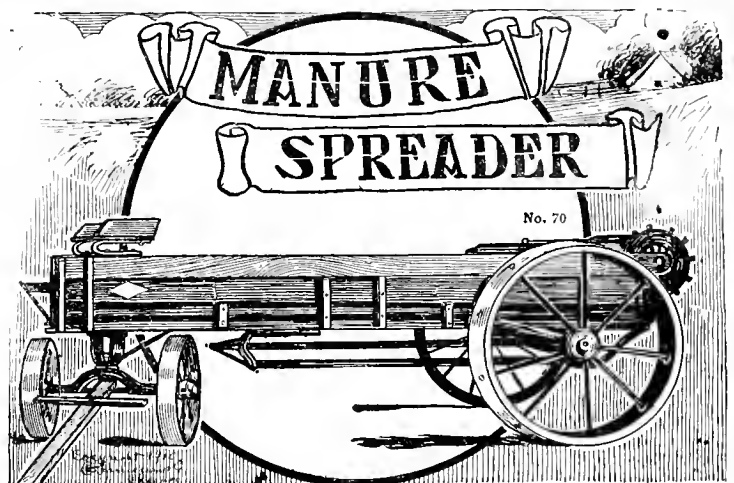
Look up the nearest DE LAVAL agent at once, or if you don't know him write us directly.

DE LAVAL DAIRY SUPPLY COMPANY

165 Broadway
NEW YORK

101 Drumm Street
SAN FRANCISCO

1016 Western Avenue
SEATTLE



ARE YOU UP-TO-DATE IN YOUR METHODS OF FARMING?

ARE YOU ENRICHING YOUR SOIL, OR ARE YOU TAKING THE LIFE OUT OF IT YEAR BY YEAR AND PUTTING NOTHING BACK?

The best known method of getting the best results on a crop without wearing out your land is to manure it; and unless this is done by the slow and laborious way of putting it on by hand, means an outlay of from \$250 to \$300 for a manure spreader.

We have something in the way of a spreader. It is a box that may be put on any farm wagon that is 44 inches on the bolster, and does the work that a \$300 spreader will do. The box is fitted with a traveling apron, shredder head, and picker, just like a high-priced machine, and the motion is imparted by a gear bolted on to the wheel of your wagon.

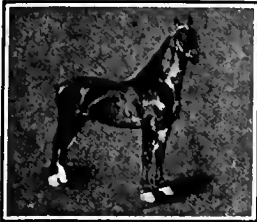
You need a spreader on your place, and there is no need of paying the high prices charged by others, as we will lay our machine down at your nearest railroad station for \$85.00.

How about it?

SACRAMENTO IMPLEMENT CO.

721-723 J STREET,

SACRAMENTO, CAL.



THE HORSE



Breeding Pleasure Horses

The majority of farmers who breed horses at all are chiefly concerned with the drafters. However, in a State like California where some of the world's greatest light harness horses have been produced, there are many breeders to whom the draft horse does not appeal very strongly. Some of these men do not feel that they have the finances to embark in the breeding of race horses to any considerable extent. Yet if they have or can secure some good sized standard bred mares they can produce pleasure horses of the highest type.

There are various types of these so-called pleasure horses, but the ones most in demand at present are the

for those that fall short of the highest market requirements. A light harness horse bred for speed alone that does not show the required clip usually brings but a small sum when sold for a roadster or livery horse. Those individuals of the heavy harness type that fail to produce the necessary height of action now find a very ready market as delivery horses or for other general purpose work. Some of the large firms in the larger cities are now buying high-class carriage horses for their delivery wagons, believing that the attention that these horses attract on the streets brings sufficient returns in advertising to offset the extra cost. A dairy establishment near one of



Mogul Giant at the Age of Four Hours. Owned by Purebred Farm, Edenvale, Cal.

carriage horses, or including a wider range, heavy harness horses. The word "heavy" in this term applies to the harness and not to the horse. Any horse that can go in heavy leather with the requisite style and action can be classed as a heavy harness horse. The common types found in this country vary in height, from that of the Hackney pony at about 14 hands to the 16 or 16½ hands of the German coach.

Action is the chief requisite of these horses, and associated with it should be a full made conformation and as much quality, style and finish as possible. Of course, the highest type of a finished carriage horse cannot be turned out without considerable training, careful and intelligent shoeing and proper biting. But the chief advantage in producing this class of horses in comparison with the light harness horses of the race horse type is, that there is a very brisk demand

the large Eastern cities recently bought twelve white delivery wagons and twelve gray horses to handle them. All of these horses showed a trace of Percheron blood, but they are sound, full made, high going, stylish chaps weighing from 1200 to 1250 pounds. They cost this firm a little over \$450 each, but at the rate their business is increasing, due apparently to the advertising of these fancy, attractive turnouts, the investment was a profitable one.

There is probably no best way of producing pleasure horses. Some of the most commendable ones ever shown in this country were Standard breds. The famous trotting stallion, Allerton, not only one of the leading sires of Standard performers, but a horse whose sons are siring them at a most remarkable rate, has produced some show ring winners in the heavy harness class.

Some men prefer to breed the gen-

uine coach breeds, and their personal likes determine whether the foundation stock will be Hackney, German or French coach. Still others prefer to use stallions of those breeds on Standard bred mares.

Regardless of how they are produced they must show very high, straight, true all around action if they bring the market price. This price may vary from \$400 to \$800 for single individuals, or as much as \$2000 to \$2500 for fancy pairs. An occasional show ring winner or pair may bring considerably more.

The last carriage team bought by the late Mark Hanna cost him \$5000. The near horse of this team was raised by an Iowa farmer from a general utility mare, sired by a Standard bred stallion, and was purchased by a local horse buyer for \$200 as a 3-year-old before the breeder discovered that the colt possessed remarkable action.

From the adjoining farm a 4-year-old gelding, sired by a Standard bred horse, sold last year for \$400. He and his mate recently became the property of a Chicago banker for \$2500. The increased value was due to superior development of all around action and manners acquired by careful training.

There is also some demand for polo ponies, but the market is so limited that it would seem more advisable for the horse breeder who does not take kindly to the drafters to devote his energies to the heavy harness type.

J. I. THOMPSON.

GAITED SADDLE HORSES.

The Live Stock and Dairy Journal—The gaited saddle horse show at the State Fair in September promises to be, as it was in 1911, the leading attraction. There will be more gaited saddle horses shown than at any time in the past. The nightly shows in the big tent under electric lights will be the greatest entertaining feature of the Fair. I say this from the experience of last year and the knowledge of the many new and high-class horses that will be exhibited. These shows will become more popular each year as the public becomes more educated in their worth.

The chief attraction at all the large fairs in the Middle West, where the most successful fairs are held, is always the gaited saddle horse show. This is both because of the unequalled high style and beauty of these horses and their education in grace of manners and movement.

As an illustration of the interest in this class of horses in the Middle West I call your attention to the \$1000 stake to be given by the Audrian County fair to be held in Mexico, Mo., in August. Think of a county fair, receiving no state aid, giving a single purse of \$1000, besides many others of less amount. Why can it afford this large purse? Simply because it is a paying investment. It draws the crowds, who furnish the money. There are twenty-five entries for this stake, about equally divided between Kentucky and Missouri. The pick of the saddle horse industry will compete for this big purse. Twenty-five of the finest type of horses to be found in the world will be lined up before the thousands of people that will congregate to witness

You are Invited--

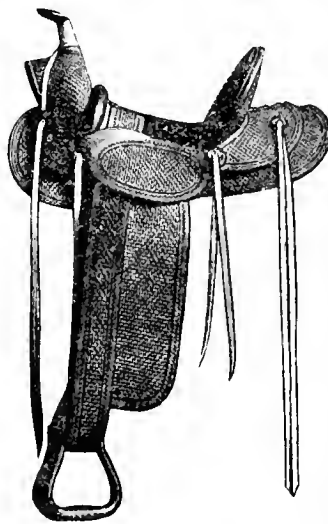
To visit the largest Saddle and Harness Factory in the West when in San Francisco.

Fifty hands steadily employed on Hercules Harness, Horse Collars and Saddles.

The standard of the coast. For sale by all dealers. Made by

W. Davis & Sons

2040 to 2052 Howard Street
(Near Sixteenth)



Our "Great Northern" High-Grade Vaquero Saddle; 3-inch stirrup leathers; Visalia tree shown. Can be had on Tehama, Lakeview or Taylor tree.

A \$45 job for \$39 if you mention this ad.



Ky. Mammoth Jacks and Registered Saddle Horses

We have a grand lot of Kentucky Mammoth Jacks and Registered Saddle Horses. The very best of individuals, and royally bred ones—good enough to show any place.

We are prepaying the express on them for the next thirty days. Write us your wants.

CLOVERDALE FARM, LEXINGTON, KY.

MINNEWAWA STOCK FARM
Four
Registered Percherons

Stallion and three mares. Not akin. Colts from all shown. Price for the bunch, \$4,000.

M. E. Sherman,

Fresno, Cal.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.



Baby Giant. Owned by Purebred Farm, Edenvale, Cal.

PUREBRED FARM.

The purebred ranks have another vital, aggressive recruit in the person of W. J. Greer, who has named his Santa Clara Valley home "Purebred Farm." Possibly it is hardly correct to say that Mr. Greer is a recruit, for although a young man he is a seasoned campaigner in the live stock field from Texas to Wyoming, and from Wyoming to California. Having decided to become a breeder of purebreds, Mr. Greer spent a great deal of time traveling throughout California, visiting many stock farms and getting a good idea of California conditions and needs.

The selection of the site for Purebred Farm seems to the writer a particularly happy one when considered in connection with the plans which Mr. Greer has in mind. The farm is situated just west of Edenvale, Santa Clara County, Cal., and comprises 325 acres of valley and foothill land. There are 120 acres of level, black loam extending along the foothills, with a gentle slope favorable for irrigation. The balance of the ranch extends up on the foothills, which are well wooded with oak.

The first well on the ranch is now down 100 feet. A four-foot strata of water gravel was found at 50 feet, but drilling was continued in the hope that a lower strata of gravel would be found. Four more wells will be drilled close to the first one, and the five will be hitched up to one pump, throwing plenty of water to irrigate the alfalfa fields.

On two adjoining ranches new wells have just been hitched to pumps, and as the writer left Purebred Farm a four-inch stream from the newest one was headed across field to a patch of young alfalfa. On the ranch adjoining this one there is a most excellent stand of corn, which could be criticised only because it shows probably too rank a growth. These spots which water has touched are only indications of what we expect to see in the development of Purebred Farm.

The stock on Purebred Farm at the present time consists chiefly of twenty head of jennets and six registered jacks, young and mature. Among them are two good, big jacks and a number of good jennets brought out from Missouri by Mr. Greer. The largest jack on the place, Baby Giant (3933), a descendant of Tippecanoe through Compromise, Mogul, Dethridge, Ringo and

Hannibal Ringo, is a big, rugged, well-boned individual standing 16½ hands and weighing 1200 pounds in good breeding condition. This jack should show some good mules when mated with the right mares. The herd of jacks and jennets will be added to a little later with a view of constant improvement in quality.

In laying out the plans for Purebred Farm, Mr. Greer has planned twenty lots of one acre each, divided by good, substantial fences and with a house in each lot for the long-eared stock.

When the irrigating plant gets to working smoothly and the alfalfa begins to yield a herd of purebred Holstein-Friesians will be added to the farm and a herd of purebred swine will naturally follow. For the dairy cows, it has already been demonstrated that the land here will produce corn, for silage, in abundance. That twenty-foot-deep black loam will produce great crops of alfalfa, and with plenty of green alfalfa for summer and corn silage for the winter months, the Holstein dairy should be one of the most profitable features of the farm.

There is an abundance of good soil in the foothill land and a great deal of it can be cultivated. Much of this will be given up to the swine herd. Barley will be sown on a considerable acreage and hogged down at the proper time. The oaks furnish an abundance of shade and there are living springs on the sidehills for water supply.

The site for the new home on Purebred Farm is one of the features of the place. From the top of a symmetrically rounded knoll the elevation is such that one may look for miles up and down the Santa Clara Valley, over and across the tops of hundreds of beautiful orchards, and with spires of the city of San Jose visible away to the north.

Altogether it appears that Mr. Greer has made a careful and wise selection of his land. He brings to his business of building up his purebred herds a sympathetic understanding of the requirements of his art and a boundless enthusiasm in carrying forward his plans.

Present indications are favorable to the breeding of mules in California. There will continue to be a heavy demand for good mules in construction work, and they are finding favor among orchardists, who claim that they are highly satisfactory in working among the trees. Our attention has been called to a number of prominent orchardists who are now using 1100 and 1200 pound mules exclusively in the cultivation of their orchards.

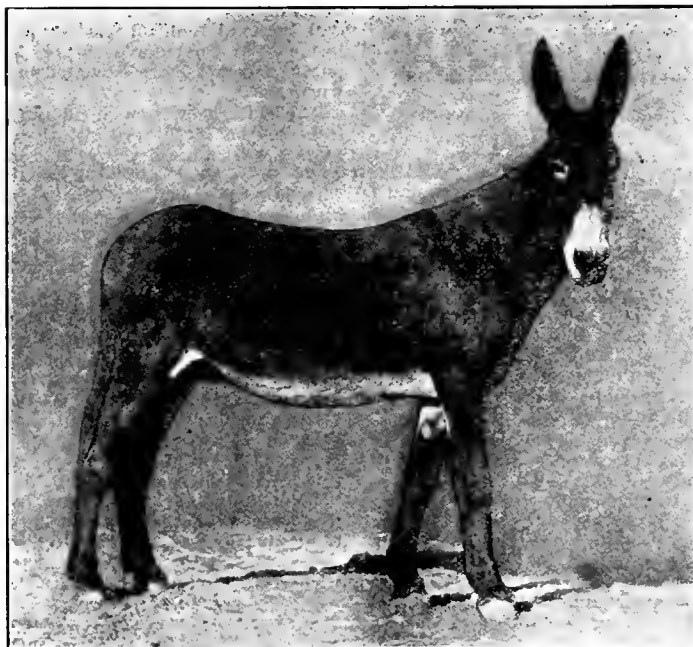
G. W. Martin of San Jose, Cal., has three good stallions in Gallifet, a roan Percheron; the bay Belgian Sultan De Z., and the standard bred Dohle Lou, by Kinney Lou, he by McKinney. All three of these stallions have stood for a heavy season at Mr. Martin's place just south of San Jose.

In a letter to the Journal, W. J. Greer, proprietor of Purebred Farm, Edenvale, Cal., advises us that one of his jennets has foaled a fine jack colt, this making the sixth consecutive jack colt foaled. At this rate Mr. Greer will soon have a sturdy bunch of sons of Baby Giant and of Sampson.

When you clean your horse do not use the currycomb roughly. If he has a fine skin do not use a comb at all, but a good hard brush. That will do him good, make his coat shine, and do you credit. Be careful to clean his feet also, and so prevent lameness. This should be done every night and with a pick, using care to see that no stones are between the frog and shoe.

FEED THE COLTS WELL.

The neglect in regularly feeding the colts good, nutritious food is sure to react on the growers of them in poor horses when grown. The colt should be kept growing from the start to make a good horse of it. In winter he should be kept fat. This is accomplished by giving it regular daily feeds of grain in addition to hay and other rough feeds. The colt that comes through winter fat and round is growing and in a good way to grow. The colt that is allowed to get poor and hide-bound in winter becomes stunted and requires half the following summer on good pasture to round out and start to grow again. It has been so reduced in flesh and weakened in vitality that it can never regain the loss, hence grows up to be an undersized and weak animal. The colt that is kept growing vigorously from start to finish on good, nutritious feeds and through good treatment and shelter in bad weather, will grow to be large, strong and have character and spirit. By good treatment an ordinary colt can be made to grow as large as either dam or sire.



Sampson. Owned by Purebred Farm, Edenvale, Cal.

it; horses that besides their unsurpassed beauty are trained to perfection. This exhibition will be so extraordinary and interesting that I feel almost tempted to cross the continent to witness it.

California is not yet ready to make such an exhibition, but there is no reason why we may not do so in the near future. We are making rapid strides in that direction. The State Fair and other fairs, particularly that of Fresno, are fast recognizing the drawing qualities of these shows.

The Pacific Coast breeders are responding to the demand made upon them by increased efforts in breeding and training the right kind.

The Pacific Coast Gaited Saddle Horse Association's big purse to be shown for at the Panama-Pacific Exposition in 1915 promises to be up to the standard set by it in its inauguration. The association set its mark at a \$6000 purse, and present indications are that it will be realized. We now have twenty-nine entries and hope to nearly double that number before the closing date, August 1st next. The entry fee amounts to \$125 each, so you can see that it is going to be worth while. Of the entries already made, about one-half are from California, with the others coming from Kentucky, Missouri and Illinois.

Gaited saddle horses are commanding higher prices at public sales than any other class. At a public sale held in Kentucky in April last, seventy-eight saddle horses averaged \$124 per head. At another big sale held in Missouri shortly thereafter the average price was something over \$400 per head. Can you beat it? I will answer for you. No. No other class of horses of like number can approach it.

If your patrons want to witness the best horse show they have ever seen in California, advise them to attend the nightly shows to be held at the State Fair in September next.

Frank S. West of Wood River, Neb., will sail for Europe July 1st, and when he returns in the fall will bring back a bunch of imported draft stallions and mares.

If a horse does not eat well have his teeth examined by a veterinary. They may need filing or he may suffer from a sore tooth. Horses have starved to death from trouble with their teeth.

Profit in Mules

The mule is the cheapest work animal on the farm. He suits the careless hired man and the poor caretaker. Give the mule a good shed, open to the south, fitted with racks and troughs, keep the racks full of hay, corn fodder or good roughage, with plenty of good sound corn, oats and bran in the troughs, a supply of fresh water handy and you have all that is necessary to take care of mules.

When the mules come in from work at night, take off the harness and turn them loose. They will roll, take a drink and roll again. In this way they eat, drink and rest, and when you are ready to work they are. All you have to do is catch your mule, harness him and hitch up. No feeding nor currying, only see that the racks and troughs are kept clean and full of good feed, and after six months hard work he will be in better condition than when he commenced work.

A mule will not founder himself like a horse. He will run off, but has sense enough to stop when he gets in danger of getting hurt. A horse will run away, lose any sense he ever had, smash up the wagon, machinery and kill himself. A mule will stop short in the team, lie down, roll and get up without tangling himself in the harness. He will do more work and look better on half the feed a horse could live on.

Farmers would find it profitable to keep two or three roomy brood mares, 15.2 to 16.2 hands high, weighing 1100 to 1400 pounds, breed them to a jack 15 to 16 hands and raise some mules. In a few years these young mules will pay for the farm. Mares with the blood of good trotting families, weighing 1100 to 1300 pounds, bred to jacks weighing 1100 pounds, produce the finest class of mules. What a young mule eats until he is 2 years old is not missed. At 2 years old he is ready to earn his board. A farmer can soon supply himself well with mules and have a pair of well broken mules for sale every year, bringing in from \$300 to \$700. They are easily raised and are not subject to disease and blemishes, and seldom get injured or cut on wire fences.

I found a great difference between the class of mules raised west of the Mississippi from the draft mares and those raised in Kentucky from trotting-bred mares. The Kentucky mules have better heads, long thin ears, good necks and better action. Those bred from the draft mares have short, thick necks, with heavy lop ears. The demand for first-class mules is above the supply and 4-year-old well broken mules bring \$350 to \$700 per pair.

Maine lumbermen have two representatives in the West buying the best mules they can find, paying \$500 to \$700 a pair for them. This means \$700 to \$1000 a pair by the time they reach the lumber camps. A friend of mine is the buyer for a large coal company that uses thousands of mules. He scours the West in search of mules for the mines. There is a market for the mule wherever there is hauling. He fills a place in the mines, lumber camps, railroads and on the farm. He fills a place which no other animal can fill, and there is nothing in sight to take his place.

Mules are becoming scarcer all the time. Look around the country and see the stallions. This means fewer mules. A jack costs somewhere from \$800 to \$1500. A 4-year-old will serve about fifty mares in a season. A 3-year-old will grow into money, and at 6 years is ready for heavy service. Jennets cost \$400 and \$500 each. Large ones, weighing 1100 pounds or over, are very profitable when bred to the very best jacks. In Kentucky many breeders are mating jennets to the

very best trotting stallions, producing hinnies. No one could guess their breeding. Recently I saw one in Louisville that was a wonderful animal. The owner had refused \$1000 for him. His hide was like seal skin, ears like rabbit's and he could trot in 2:30. A great many hinnies are being raised in the mountain districts, and they sell at prices ranging from \$250 to \$400.

A mule authority says: "There is nothing that walks that will beat an old jennet as a money maker."

Out in Missouri, when a farmer goes to the bank to borrow money the banker asks: "How many mules have you?"

The farmer says: "Fifty 2-year-olds."

The banker says: "You can have \$5000."

As long as railroads build, lumber is hauled or coal mined, grow mules. Not one year, but every year. Mr. Mule will save you money and pay the mortgage on the farm.—C. E. M. in National Stockman and Farmer.

THE SAN JOSE PARK.

The San Jose Driving Club track is being put in first-class shape for the coming races. This is said to be one of the fastest tracks in the country, and if the harness horses take as kindly to it as have the automobile speeders, there will be some new marks hung up on it at the September circuit meet. The live stock show and Santa Clara County fair exhibits will be held in this park, the live stock sheds having been allotted a space up near the entrance. Manager Ray Mead recently put down a 150-foot well on the south side of the track, and has 51 feet of water gravel. He has planted the entire inner field to alfalfa, which this well will irrigate. There are 30 acres in the infield, and when this looms up as a smooth, green alfalfa patch it will add much to the general appearance of the park.

CLYDESDALE NOTES.

A pair of high-grade Clydesdale geldings weighing right at two tons, was bought by a Vancouver party for \$1200 at the Calgary Spring Show, after Alex Galbraith had awarded them first prize.

A Clydesdale gelding which, for the past three years has seen daily service in the Chicago stock yards, is one of the features of the display of farm animals exhibited by the Wisconsin Live Stock Breeders' Association on its tour of Northern Wisconsin. R. B. Ogilvie, Secretary of the American Clydesdale Association, regards this gelding as one of the most perfect drafters in the country. He was purchased by Mr. Ogilvie as a 3-year-old, and has been in constant service since coming into the possession of the Union Stock Yards Company. This superior 6-year-old represents three straight Clydesdale crosses on a native mare, and abundantly testifies to the merits of the Clydesdale breed.

Clydesdale breeders in all parts of the world will learn with the deepest regret of the death of William Taylor, Park, Mains, Renfrew, Scotland. He was a gentleman in every sense of the term, and home breeders and exporters alike had learned long ago to put implicit trust in him. His most famous stallion was the great Sir Everard, a big, weighty horse which was awarded the Glasgow premium repeatedly. He sired many big sound horses, including the world famous Baron's Pride, sire of the Clydesdale stallion Baron of Buchlyvie, which was sold

in Scotland at public auction for the world record price for a draft stallion, \$47500. One of Mr. Taylor's young stallions at his sale under the hammer brought \$8100.

John Troup, Goleta, Santa Barbara County, Cal., in a letter to the Journal, reports the sale of some good stock during the past spring months. Among his sales are numbered ten stallions and one jack, twenty-two head of bulls and twenty four head of heifers. These were all registered purebreds, and included Clydesdale, Percheron, Shire and French Coach stallions, Hereford, Shorthorn, Holstein and Ayrshire bulls and Shorthorn, Jersey and Guernsey heifers. Mr. Troup is now taking orders for a new importation.

Horses, Mules & Shetland Ponies

I both buy and sell mules and horses. Have on hand at all times mules to hire in carload lots. Also breed Shetland Ponies, and have several weanling colts and a few well broke ponies for sale.

J. L. MENDENHALL,
WILLIAMS, CAL.

That Carload of

JACKS IS GONE

About September 1st I will be at the Fair Grounds, Stockton, Cal., with two carloads of Jacks and two carloads of Jennets. This will be unquestionably the best importation of Jacks and Jennets ever brought to the State.

Write me your wants now, and I will have an individual to suit you.

H. B. THORNBERRY,
Box 679, Stockton, Cal.



Jack Rogers 4576

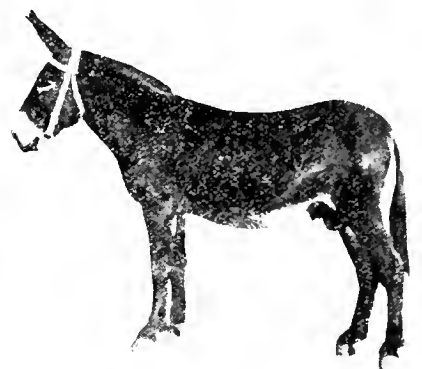
Won First Prize at State Fair in 1911 in saddle class, 2 years and under 3, and also won second in combination ring among aged horses. He fills the eye of lovers of good horses. I stand him at the low sum of \$20.

Also Col. Rogers (3287) at the same price.

Their colts will sell at sight to any one wanting a fine saddle colt.

J. T. RAGSDALE

Breeder and Trainer of Five-Gaited Saddle Horses.
MERCED, CALIFORNIA.



THE WORLD'S CHAMPION STUD of PERCHERON HORSES

I received more prizes with 10 Percheron horses bred and shown by me at the World's Fairs at Chicago and St. Louis, than all the other breeders together. I have over 100 stallions for sale at low prices and easy terms. Guaranteed to get 90 per cent with foal.

E. F. KLEINMEYER,
Covina, California.



Lafayette Stock Farm

J. CROUCH & SONS., Props., - - LAFAYETTE, INDIANA.

Grand Summary of Prizes Won in 1911

Grand Special Prize Offered by the Societe Hippique Percheronne de France—For best group of five Imported Animals, either sex, any age, at International, Chicago, 1911. Bronze Statue, value 2500 francs, won by five of our imported 3-year-old stallions.



- 73 First Prize Ribbons.
- 56 Second Prize Ribbons.
- 28 Third Prize Ribbons.
- 18 Fourth Prize Ribbons.
- 16 Fifth Prize Ribbons.
- 2 Sixth Prize Ribbons.
- 2 Reserve Champion Ribbons.
- 23 Champion Ribbons.

A new importation of good, big-boned, heavy horses, including Percherons, Belgians and Shires, can be seen at our permanent stables at the State Fair Grounds, Sacramento, Cal.

J. F. CAMPBELL, Mgr.,
Phone Park 31. Sacramento, Cal.



THE SWINE HERD



The Live Stock and Dairy Journal—

We recently purchased of G. W. Berry & Sons, the noted Berkshire breeders of Topeka, Kas., two splendid registered Berkshire sows known as Silver Tips 185th and Prairie Silver Tips. They were both sired by Robhood, one of the handsomest, largest and most stylish boars ever bred by Berry & Sons. Robhood was sired by Im. Baron Compton, while his dam is the noted brood sow, Silver Tips 141st, a daughter of the great Berryton Duke, Jr. The dam of Robhood is an intensely bred "Silver Tips," and a double grand-daughter of Black Robinhood. His sire, Imp. Baron Compton, was bred in England, and the latter's dam, Compton Empress, was one of the greatest sows in Great Britain. The dam of Silver Tips 185th is Rival's Duchess S. 2d, a daughter of the grand champion boar, Rival's Champion, a boar of national reputation that recently was sold to Iowana Farms of Davenport, Ia., for \$1750. The second dam of Silver Tips 185th is Star's Champion Lady, by Star Masterpiece, and her third dam was sired by Premier Longfellow. The dam of Prairie Silver Tips is Sallie Lee 43d, by Baron Duke 92d by Premier Longfellow. Her second dam is Sallie Lee 29th, a daughter of Sallie Lee 5th, the dam of the great Lord Lee, sire of Handsome Lee. Anyone familiar with good Berkshire breeding will readily recognize the superior breeding of these two sows which we just purchased. Individually they are all that could be desired, being of fine conformation with extra fancy heads and ideal markings, and we feel safe in saying that either in breeding or individuality they are not surpassed by any Berkshire ever shipped into this State. Since their arrival Silver Tips 185th has farrowed seven as fine pigs as we ever saw, being by Silver Tips Duke, another promising boar bred and owned by G. W. Berry & Sons. He is one of the best sons of Berryton Duke, Jr., and his dam being Silver Tips 215th, a daughter of Climax Baron, by Masterpiece Climax, a son of Masterpiece. His second dam is Silver Tips 120th, a daughter of Berryton Duke.

Very truly yours,

CLAUSEN & PETERSON.

Prairie Stock and Dairy Farm,
Yolo County, Cal.

THE YORKSHIRE AS A GRAZIER

The Live Stock and Dairy Journal— I was surprised to see in your May issue a statement from a California farmer that he had been disappointed in the Yorkshire hog as a ranger.

There is no better grazier than the Yorkshire, and this is the first time I ever heard this point questioned. It was because of this method of raising them in England that the breed originally acquired the bacon form. It stands to reason that a large, rangy animal with a active disposition, such as the Yorkshire is, would be a good grazier. The trouble your correspondent encountered was probably this: The Yorkshire will grow under proper conditions until about 3 years of age and more, attaining a size of from 700 to 1200 pounds. On pasture, with little carbonaceous food, they will naturally grow frame and keep on growing frame; and, by the way, they will grow more pounds of this frame per day than any other hog. The point is, that when they get to weigh about 150 pounds they should be turned into a small cornfield that is ripe and fed some protein to balance the ration, or into a ripe pea field and fed some corn to balance the ration, or shut up in small yards and fed a balanced ration. That is to say, they should be fed a fattening ration and finished off in about six weeks after they weigh 150 pounds.

Then again your correspondent may be laboring under the impression that a hog is not fat or finished unless he is as broad as he is long. A long-bodied Yorkshire with three inches of flesh on his ribs will not look as fat as a short-bodied Poland with but half as much flesh on his ribs.

HARRY G. KRUM,

Secretary American Yorkshire Club,
Minnesota.

SMITH'S DUROCS.

The Live Stock and Dairy Journal— The Durocs are coming along nicely. Have several exceptionally good ones, sired by Nebraska Sensation and out of Billie Rosebud, Jr., sows. Nebraska Sensation has made a good growth this summer. He is a hog of good scale, and is exceptionally smooth. Recently sold to G. T. Farmer a fine gilt. Yours for good Durocs.

H. H. SMITH.

Kings County, Cal.

GRAPE WILD BERKSHIRES.

Last week I visited Grape Wild Farm to see the Berkshires, and found them in fine shape and the April pigs doing well. Old Double Premier is being fitted for show, and now probably weighs over eight hundred pounds and carries it well. He will be shown against Four Oaks's new boar just out from the East. The two sons of Masterpiece are in good condition for hard service. The son of Berryton Duke, Jr., is a very handsome boar, low down, wide and very short headed. A great many of the sows are suckling pigs, and several will farrow soon. The pigs are the best lot they have ever had, and are doing well.

The yards have concrete ditches and bath tubs, with running water, so that the hogs are sure to have plenty of good drinking water and a good place to cool out on a hot day. It is hard to protect hogs from hot weather without plenty of water.

Grape Wild Farm will have a good exhibit at the State Fair, as usual.

G. A. MURPHY.

A QUALITY BOAR.

The Live Stock and Dairy Journal— If you don't care to hear one blow his own horn it will be needless to read beyond the close of this sentence. We are going to blow about our junior herd boar, Robhood, Jr. (156338). Robhood, Jr., was 1 year old on the 3d of June, and weighed 454 pounds. His sire, Robhood (138,500) is reputed to have weighed 525 pounds at 1 year of age.

We would not have you believe that this pig was fed on any old thing that he chanced to find lying around, but he was fed and developed in the best way we knew.

We have three litters by Robhood, Jr., all out of gilts, and, all things considered, two litters are extra and the third litter is fairly good. We believe this Berkshire pig is going to make a great hog, and we feel somewhat proud of him. At least, we do not think that he will be any discredit to the Berkshire breed.

CHARLES GOODMAN.

Colusa County, Cal.



Profitable Porkers in Madera County, Cal.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

300

Purebred
Berkshires
Duroc - Jerseys
Tamworths
at

Swineland

We are offering high-class Boars, ready for service, and Spring Pigs of both sexes, for immediate shipment.

All stock sold on a money-back guarantee.

Swineland

Box 161. YUBA CITY, CAL.

RED DUROC HOGS

Best Stock Now in California

YOUNG STOCK AND SERVICE BOARS AND SOWS FOR SALE

All registered pure-breds, and from such sires as Wonder and Klondike. New Importations from Missouri and Indiana. We are located in the Imperial Valley, and are here to supply California, Oregon and Arizona breeders. Write for prices and pedigrees to

MOORE BROS.,

Box 202, El Centro, Imperial Co., Cal.



Recorded Mule Footed Hogs are very prolific as well as less susceptible to Swine Diseases. Their great vitality, large litters and quick growth make them the coming hog. JOHN H. DUNLAP, Box 499, Williamsport, Ohio.

Duroc Jersey Swine

Champion herd of California, and champion 6 months boar of Oregon heads my herd of gilts from which I expect great results. Young stock, both sexes, for sale at right prices. Booking orders for February pigs.

J. K. FRASER,

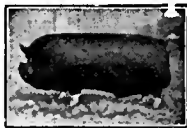
DENAIR, CAL.

San Joaquin Valley



FOUR OAKS STOCK COMPANY

Woodland, California



BREEDERS OF BERKSHIRE, HAMPSHIRE AND
POLAND CHINA HOGS.

Their breeding is as good as it is possible to obtain. Since selling our herd boar, Double Premier (88215) to Mr. A. B. Humphrey of Mayhews, Cal., and Kennet (106045) to Mrs. C. E. Byrus of Woodland, we have put at the head of our herd Ravenwood Longfellow 10th (136430), assisted by Holt's Longfellow, a son of Double Premier (88215). We also have a Double Black Robinhood boar to breed our twenty head of Double Premier gilts to for spring farrow. A few of our mature sows are Ravenwood Duchess 92d (140527), Trixie M. (120796), Star 3d (120795), Royal Lady 10th (121407), Berrys' Eclipse (151956) whose sire sold for \$1000 this fall; Belle Wilts 14th (113497), Lady Premier 3d (106046) and Woodland Lady Premier (144095)—the best one we ever raised; sired by Kennett (106045).

Correspondence promptly answered. Our prices are reasonable for quality of stock.

DUROC JERSEYS AT MODESTO

BOARS, SOWS AND YOUNG STOCK FOR SALE.

Registered Duroc Jerseys. No better anywhere. Write for prices. Have stock for immediate delivery. Address:

JOHN P. DAGGS

BOX 5 R. F. D. 5 (One Mile North of Town), MODESTO, CAL.

BERKSHIRES

A grand lot of richly bred pigs of both sexes for sale. Express prepaid. Also a lot of good service boars offered cheap.

A few tried and proven brood sows and bred gilts priced to sell. Satisfaction guaranteed. Write us your needs.

WEAVER STOCK FARM, BRAWLEY, CAL.

REGISTERED

POLAND CHINA SWINE

PRIZE WINNERS

Finest Stock in the State from \$30 up

M. BASSETT, Breeder

HANFORD, CAL.

SUNNY SIDE STOCK FARM BERKSHIRES

Young Stock from Blue Ribbon Winners For Sale

G. A. MURPHY

PERKINS, CAL.

Quality Berkshires

Oak Grove Berkshires are the large, growthy, vigorous, money-making type. They carry the blood of Masterpiece, Black Robinhood, Silver Tips, Premier Longfellow and Empress, names that mean quality wherever Berkshires are bred.

We are able to quote you the best Berkshires at the cheapest prices.

Further information cheerfully given.

Oak Grove Dairy Farm, Woodland, Cal.

PHOTOGRAPH YOUR BERKSHIRES

The American Berkshire Association offers liberal prizes for the best photographs of registered Berkshires taken during the year 1912.

Get out your camera and use a roll of film. If you don't have any good ones don't be discouraged, but study out the reasons for your failure and try some more.

Don't try to catch them on the run, but get the head up and the feet in position to give good lines. The best time is when they are waiting to hear an ear of corn drop. A thin hog takes a poor picture, but a sow in good flesh and heavy in pig takes a good one.

G. A. MURPHY.

HANDLING PIGS.

E. J. Iddings of Idaho, an authority on live stock, says about handling pigs:

"The profits of a successful hog man rest largely upon his success in raising pigs. No matter how well the sows may have been managed and how much care and attention may have been bestowed upon them, a little carelessness and lack of skill at farrowing time and during early weeks of the pig's growth may result in the loss of a large percentage of the litters and the stunting of many more. Warmth and protection during the first few days and sufficient amount of nutritious feeds and fresh air and plenty of sunshine later on make for growthy pigs that bring profit to the breeder.

"If from a well-nourished dam and a healthy strain of animals the pigs rarely need attention at farrowing time. A quiet sow does not object to the presence of the herdsman, and weak pigs can be helped to suck without irritating the sow. Nervous sows are often best let alone. In very cold weather some artificial heat may be necessary in the farrowing pen. Moderate heat often helps, for a pig once thoroughly chilled, in a large percentage of cases, never survives for any length of time.

"At three or four weeks of age the pig will begin to pay attention to his mother's feed. This is to be encouraged, and as soon as the pigs are eating well, a creep to a pig feeding lot should be provided. Skim milk is the standard pig feed, but some grain should be fed in addition. A palatable mixture for this purpose is four parts shorts, two parts corn and one part tankage. If corn is not available, ground wheat, sifted ground oats or field peas may replace the corn. Both sows and pigs should have the run of alfalfa, clover, rape, oats and peas, or other pasture. The object to be secured with the pigs is to train them to depend on prepared feeds to a large extent before weaning time.

"If the sows are to be rebred at once, the pigs should be weaned at eight or nine weeks of age. If one litter per year only is planned, the pigs may be allowed to run with the sow until twelve or fourteen weeks of age.

"After weaning, plenty of skim milk, fresh pasture and a grain ration in addition, are necessary for best results. In no case will it be found advisable to expect pigs to make profitable growth on pasture alone. At the age of weaning the pig should be making very rapid and his most profitable growth. It takes 50 per cent more feed to put a pound of gain on a 150-pound pig than to put a pound on one weighing forty pounds, and 83 per cent more feed for a 350-pound pig. Keep the pigs gaining while young on pasture and dairy by-products, if available, always supplemented with a grain ration."

SUPPLEMENTAL FEEDS ARE ECONOMIC

Experiments at the Oregon Experiment Station, where grain feeding has been compared with grain and skim milk, have shown that 100 pounds of skim milk have saved from 20 to 50 pounds of grain, more commonly about 30 to 40 pounds. One hundred pounds of tankage have saved about 400 pounds of grain. A dollar invested in tankage at 2½ cents per pound, or in skim milk at 20 cents per hundred pounds will thus usually save from \$1.50 to \$2, and in some cases even more. It must be understood that this saving applies only where limited amounts of such feeds are given in connection with grain. If these supplemental feeds were to take the place of the entire amount of grain no such saving would result; instead the pigs would probably go off feed and the results would be entirely unsatisfactory. The reason for this is that grain, as wheat or barley, supplemented as mentioned, makes a well balanced ration. It is appetizing and suited to the pig's digestive system, and contains the proper amount of the nutrients which the pig needs. Grain alone, or skim milk or tankage alone, will not meet all of these requirements.

There are other feeds which may be used as a supplement to wheat or barley with good effect. The best of these is middlings. Where middlings are fed from one-fourth to one-third of the ration should be of this feed. When fed in this way good results can be expected, and it will be found that the middlings will save much more than their own weight in grain. When used in this way middlings will be worth from \$2 to \$3 per ton more than wheat, barley or corn, and may be purchased on this basis.

Both middlings and skim milk may be fed to advantage to hogs of any age, but especially to sows suckling young pigs and to growing pigs from 1 to 4 months old. Shorts may be used in place of middlings if of similar composition. Some shorts are about the same as middlings, while in other cases they are the same as bran. Bran is a bulky feed and contains so much fiber that its use for pigs is not recommended, and its value for dairy cows makes the price too high to justify its use for pigs. Alfalfa, vetch or clover hay, which are especially valuable for stock hogs in winter, has little value for fattening hogs, and its use for this purpose is not recommended. The same may be said of kale and roots. Oats are very good for pregnant sows, but have too much bulk for the best results with other stock.

M. Bassett of Hanford, Cal., will be on hand at the California State Fair with a string of Poland Chinas better than any he has yet shown, and that is saying a great deal. There will be more Poland China entries this year than ever before, and there will be an opportunity offered to the public to get a view of several herds of good individuals.

The Weaver Stock Farm of Brawley reports the sale of a good Berkshire pig to the State School to be placed at the head of their herd of swine. The Weaver people are getting a nice bull calf from the school herd of Holsteins.

Calla Grove Farm, located at Ripon, San Joaquin County, writes the Journal that they will engage in raising hogs for market on a large scale. Herebefore they have confined their attention to breeding stock exclusively.

The Large Improved Yorkshires

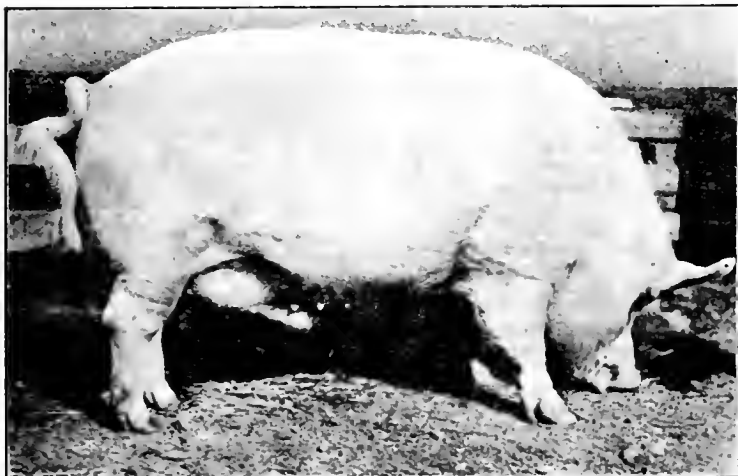
(Written for The Live Stock and Dairy Journal by Harry G. Krum)

The Yorkshire is the only pure breed of hogs to be found in every hog growing county of the world. This breed is rapidly increasing in numbers, not only in this country, but in all other countries. It is safe to assume that this popularity would never have resulted unless the breed possessed outstanding merit. Probably the greatest inducement to raising Yorkshires has been the fact that they produce to the greatest degree of excellence that world renowned food, breakfast bacon. Bacon has always been a popular food since man first learned to cure meat. It has also been of inestimable value in the settling of this country. Some one very aptly said that the trails of the pioneers were greased from the Atlantic to the Pacific with bacon rinds.

Of late years the public has grown more discriminating, and will only accept first-class bacon. They want bacon of good flavor, mostly lean, evenly distributed. This fine quality bacon can only be produced from a long, deep-sided hog, a hog that will lay on more lean meat than fat. Of course, the feed has some effect on the quality of the meat. However, it is just

the and of good disposition. Both sexes are active, so that they take sufficient exercise themselves to produce strong, growthy pigs. This breed is more prepotent than any other since it has been bred pure for about four hundred years altogether.

Of most importance, perhaps, we find the Yorkshire sows unsurpassed for mothers. They produce from eight to sixteen pigs to a litter, and have plenty of milk to make the pigs thrive. This fact was demonstrated at the Iowa Experiment Station several years ago. In the tests made it was found that to produce a hundred pounds of pork on sucking pigs it cost \$129, \$5.61 and \$3.15, respectively, on pigs of the three leading lard type breeds, while the suckling Yorkshire pigs put on a like gain for \$1.83. This is a very important point, for the first two months of the pig's life largely determines what will be accomplished later. Since these sows are vigorous and active they can be used until twelve or fifteen years of age, for, as a rule, they do not become clumsy with advancing age, as do the sows of the lard type. Hog growers now agree that the largest litters of strong,



Excellent Type of Yorkshire Boar. Bred by T. H. Canfield.

as impossible to make fine bacon from a Poland China as it is to make lard from a Yorkshire, regardless of feed. Not only is the demand for bacon becoming more fastidious, but it is growing very rapidly. The demand for bacon in this country alone has doubled in the last five years. Not only is bacon popular, but justly so. Our scientists have found out in their experiments on human nutrition that bacon contains more nutriment than any other meat. It is not surprising then that the Yorkshire is popular, for he has been bred and selected for greatest bacon production for two centuries.

The next point that recommends the Yorkshire to us is that the form necessary for the production of fine bacon in large quantities is the form demanded by natural laws for health, vigor and prolificacy.

Now, the point is this: The Yorkshire has been bred for this natural, healthful, vigorous, prolific type for two hundred years, and this type is so stamped in his blood that he is able to reproduce his type even when crossed with a purebred lard type hog.

The breeding qualities of the Yorkshires naturally appeal to the breeder. We find them of calm and quiet disposition; even the sows at farrowing time are, as a rule, quiet and easily handled. The boars are gen-

erally of good disposition. Both sexes are active, so that they take sufficient exercise themselves to produce strong, growthy pigs.

Because of the fine quality of the meat this breed is particularly adapted to a large class of farmers who grow only enough pork for themselves and a little to spare. Yorkshire pork has a flavor all its own—it tastes something like turkey with a pork flavor, the flat, greasy taste of soft lard pork being entirely absent. In fact, it cannot be surpassed for home use, either fresh or cured. It is interesting to note that, although the Yorkshire produces very little lard, that little contains much greater shortening qualities than ordinary lard. This is much appreciated in pork for home use.

The reasons, then, that make the Yorkshire so popular are, first, the fine quality of breakfast bacon he produces; and, second, the fact that in producing this "best of all meats," the Yorkshire maintains that form demanded by natural laws for health, vigor and prolificacy.

Mistake of Breeders.

A great many breeders seem to think that if they possess a purebred boar the quality of the sows does not count for much. This is a sad mistake indeed, and the farmers cannot be too careful in the selection of well-bred sows.

25---Bred Berkshire Sows---25

FOR SALE

We offer twenty-five high-class bred Bred and Sows for Sale. Bred to farrow late in July, August and September.

They are large in size and of good quality. They are daughters and grand-daughters of Premier Longfellow, Masterpiece, Baron Duke 50th, Rivals Champion, Mayhews Premier and other good boars, and they are in service to a son of Premier Longfellow, two sons of Masterpiece and a good son of Berryton Duke, Jr.

We also have some young Boars and late Spring Pig for sale.

Prices on bred sows, from \$35 to \$60.

Come and get your pick, or write for description and prices.

GRAPE WILD FARM

A. B. HUMPHREY, Proprietor.

MAYHEWS, CAL.

Farm Located Eight Miles East of Sacramento on Folsom Road.

J. FRANK SMITH & SONS

Breeders of

REGISTERED DUROC JERSEY SWINE.

Young stock for sale, out of dams of choice breeding and sired by two great boars, Billie Rosebud, Jr., No. 39729, and Nebraska Sensation, No. 10561. These boars carry the blood of great winners and producing hogs.

All stock guaranteed to be as represented. Address:

H. H. SMITH, Mgr.,

Route No. 1, Box 42.

Hanford, Cal.

POLAND CHINAS

Two Registered Boars, ready for service. Good individuals. Prices Right.

CHAS. R. HANNA, R. 3, Riverside, Cal.

Dutch Belted Cattle

Hampshire Swine

In Dutch Belted Cattle I have the winning herd of America, having won all the important prizes at the National Dairy Show for the last five years. Young stock for sale.

My Hampshire Hogs have been selected with great care and my herd is one of the oldest in America. Herd headed by El Salvador, winner of two silver cups in the strongest competition of the middle west. Fifty young sows and boars for sale. This breed has won over all others in the dressed carcass contest for several years at the International Fat Stock Show.

If interested in the best Irrigated Valley in the U. S. write for circular.

FRANK REED SANDERS

Salt River Valley, Mesa, Arizona

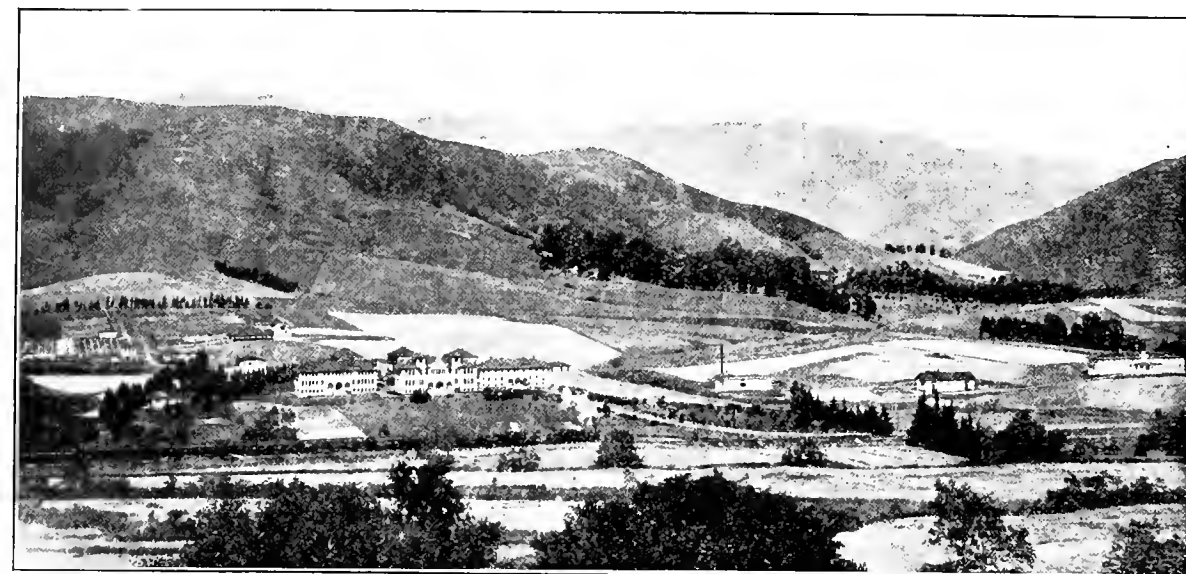
For Your Hogs DIGESTER TANKAGE

Digester Tankage develops bone and muscle in young pigs and **MAKES THEM GROW**. It fortifies and strengthens the system against attacks of disease germs so that Tankage-fed swine seldom suffer from epidemics. It imparts such fit and finish to "show" swine and market hogs that it never fails to develop blue ribbon winners in the show ring and toppers in the market.

As a balancer in making up the ideal ration it is without a rival.

For full particulars and prices address:

THE WESTERN MEAT COMPANY
Animal Food Dept. San Francisco, Calif.



Showing Buildings and Beautiful Natural Environment of California Polytechnic School, San Luis Obispo, Cal.

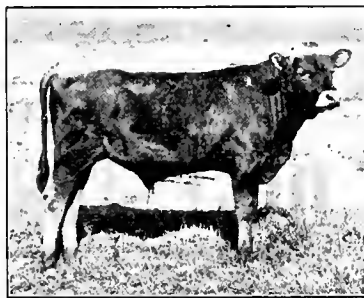
AGRICULTURE AT THE CALIFORNIA POLYTECHNIC SCHOOL.

The constant and rapid increase in population in California, necessitating the increased productiveness of the land, has naturally multiplied the agricultural problems greatly. Land has risen in value, and the limit in most sections is not yet reached. Large tracts are being divided and sold in small farms, the small farmer being able to practice more intensive methods, thereby increasing the productiveness of the land and making it of much more value, not only to the immediate owner, but to the community in general. People are all the time coming more to the realization that the land is the real source of the country's wealth, making for the popularity and dignity of agricultural pursuits. These changes in sentiment are reflected at no place any more than in our educational system. Agriculture is not only given a prominent place in the larger State institutions, but is being introduced into high schools and even into some grammar schools.

Some nine years ago the State appropriated money for the establishment of a secondary school at San Luis Obispo, in which agriculture was to play quite a part. This institution has made a constant growth until now it has a fine equipment of buildings and laboratories and a large staff of instructors. The annual attendance is about two hundred. This year there is a graduating class of twenty-five. The attendance is on the increase, and preparations are being made to accommodate more students next year. The school owns a farm of over three hundred acres, which is operated on a practical basis, with the idea of instruction in modern agricultural methods always kept in view. The farm is well stocked with high-class purebred live stock, having Percheron and Friesian horses, Holstein and Jersey cattle and Poland China and Berkshire swine. In these herds can be found excellent types, in fact, some of them have been first prize winners at the State Fair. At the head of the Percheron stud is the imported stallion Ibidem (80683) (44767), pronounced by good judges to be one of the best Percheron stallions in the West. Nine purebred mares owned by the school have been mated with him this year, and there are a number of nice young fillies coming on. Some very excellent Jerseys are kept, a cow Marquis Foxy Belle (219313) making twenty pounds of butter in seven days some time ago. This cow

dropped twin heifers last February. The school contemplates making additions to both the Jersey and Holstein herds this summer. Quite a large herd of swine is kept on hand all the time, something like twenty litters each of both Berkshires and Poland Chinas being dropped every year. At the head of the Berkshire herd are Ames Rival 5th (135041), a pig of the Lord Premier's Rival strain, from Roodwood Farm in Iowa, and Baron Geronimo (153625), bred by S. B. Wright of Santa Rosa. This latter fellow is of fine type and weighed five hundred pounds at 1 year. Much is expected of his offspring. Hillcroft Hero II (61369), bred by Lyman Peck of Nebraska, is the main stock boar at present in the Poland China herd. Youngsters from him are coming along nicely.

All this live stock equipment affords good material for practice in live stock judging, for feeding experiments and for studies in breeding and live stock



A Future Herd Header at California Polytechnic School.

management. If we can impress upon our young men the proper ideals in type and management of live stock we think we have done much for them.

But the animal husbandry work is only one phase of agriculture at the school. Soils, crops, horticulture, farm management, farm machinery, etc., are all given their due share of attention. Instruction is given in creamery work and a regular creamery is operated on a commercial scale. The boys have an opportunity to do everything from testing milk and cream for butter-fat to the manufacture of butter and cheese. Wood working and machine shops are operated on the grounds, and students in agriculture may take as much of this kind of work as they have time and inclination for. No man is allowed to fill his schedule so full that the

work cannot be well done, but, on the other hand, must take enough work that he may have no idle time.

With all this practical work the other side of an education is not neglected, and instruction in academic subjects of ordinary high school grade is given. The modern farmer is demanding and getting and using culture of the same kind as his city-bred brother, and it is the aim of schools like the Polytechnic to not only fit a man to be useful to society in a practical way, but to enable him to appreciate the finer side of things and enjoy life to its fullest extent.

A FUTURE FOR YORKSHIRES IN CALIFORNIA

The Live Stock and Dairy Journal—I like your paper very much, especially the Swine and the Poultry Departments, and want to ask where I can buy the large Yorkshire hogs in this State. I have in my care a very fine sow of that breed owned by L. H. Storgaard; for many years the live stock editor of the Dakota Farmer of Aberdeen, S. D. He bought her of Canfield of Minnesota, who has probably the finest herd of Yorkshires in the United States. She was brought into this State to demonstrate that the white hog will stand the summers here as well as the black, and because Mr. Storgaard believes that the feed we have in this State is better adapted to the bacon type than the lard type of hogs. This sow was sick on arrival here a year ago last April, and lost the first litter of pigs, numbering twelve. Since then she has had two litters, one of twelve and now another of thirteen. She has stood the summer heat as well as the black hogs, and got nothing but the feed that they did. She is now a year and a half old. I would like to get a male of that breed, for it now seems as if she has entirely recovered from her sickness, and is safe to raise pigs from. If a breeder of Yorkshires will communicate with me I shall be very much pleased to correspond with him. I feel that there is a great future for this breed of hogs in this State. To be sure, they require considerable feed to finish, but when finished there is no more beautiful hog. It may sound strange to call a hog "beautiful," but there is such a thing. Well do I remember a small Yorkshire sow, about 3 years old, we fattened for family use in Minnesota. She dressed 400 pounds and snow white. To me she was as pretty as a tree loaded with fruit or a bush covered with flowers.

That year we marketed \$1000 worth of hogs, and that at \$3.70 to \$4 per hundred weight. The feed problem is a drawback here, but with pumpkins to help along and then finish on Gyp. corn it makes nice meat.

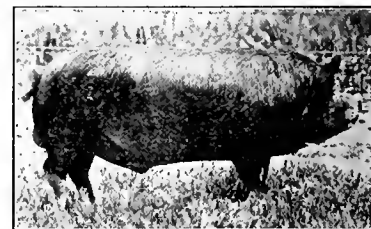
MRS. ALICE M. SHEPPARD.
Fresno County, Cal.

CHANGES IN CALIFORNIA STATE FAIR PREMIUM LIST

The premium list for the 1912 California State Fair shows a number of changes in amounts of prize money and in classifications. The first one noted is in the draft horse classes where importers will this year compete for cash prizes instead of medals as heretofore. In the saddle horse classes the money prizes have been increased, which is a step in the direction of eventually larger prizes for these valuable attractions at the State Fair.

The Shorthorn prizes are somewhat smaller this year, owing to a smaller appropriation by the American Shorthorn Breeders' Association.

In the dairy cattle classes a number of important changes were made. First, the yearling and calf classes have been divided into senior and



Baron Geronimo (153625). Berkshire Boar Owned by California Polytechnic School, San Luis Obispo, Cal.

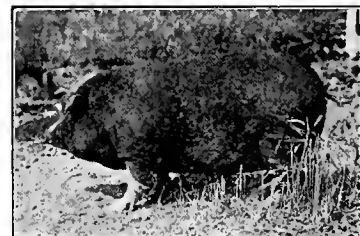
junior classes, a change which will be welcomed by exhibitors. From the first prize in all classes the sum of \$5 has been cut off from last year's list and has been added as a fourth prize, whereas there were only three prizes in all classes last year.

In the milking contest there are three classes this year. One for cows 4 and over, one for cows 3 and under 4 and one for heifers under 3. The cash prizes in these classes have been increased from \$180 to \$330, a substantial increase.

In the swine classes two new classifications have been added. Both provide for breeders' ring of boar and three sows, one class 1 year and over, and one class under 1 year.

Among new specials in the swine classes are specials of \$35 offered by the Duroc Jersey Association and \$20 by the National O. I. C. Record Association. Mulefoots have a separate prize list from other breeds, prizes being somewhat smaller.

In the poultry classes special prizes have been greatly reduced, but individual prizes are larger, and where there were only first and second prizes heretofore there are four prizes in each class this year.



Type of Poland China Owned by California Polytechnic School.

SHEEP

California Supplies Lambs to Eastern Markets

One hundred carloads of lambs have been shipped from Sacramento Valley points to Eastern markets this season, according to a statement of James Warrack, manager of the Sacramento office of the Union Pacific railway. This is considerably in excess of shipments of former seasons, due to the fact that conditions here have been unusually favorable for sheep.

A scarcity of spring lambs in the Eastern markets has made a sharp demand for the choice California stuff, which commands a premium over less desirable Eastern lambs. Quotations are ranging considerably higher than last year at the same season. A month ago real choice spring lambs command \$9 to \$10, but at present are about a dollar lower.

Two years ago the shipment of lambs from California almost across the continent was regarded as an experiment; but it was demonstrated that good railroad service made it possible to land them as far east as Chicago in splendid condition after an eight-day run.

Tennessee and Kentucky are the main supply sources of spring lambs for the Eastern markets, the crop usually moving freely in June, but winter severity and late spring conditions are handicaps often encountered in those districts.

Conditions in California usually are such that spring lambs can be supplied the Eastern markets before the Tennessee and Kentucky crops are ready, and at a time when springers are a luxury and prices attractive.

Indications are that this State will always contribute heavily to the supply at Eastern markets, and this should be an added incentive to the sheep industry in this State. Lamb growers in other districts already realize that the competition of this State is a factor to be reckoned with, and it is up to our sheep raisers to make the most of their opportunity.

PROFIT IN PUREBRED SHEEP IN CALIFORNIA.

The Live Stock and Dairy Journal—I believe there is profit in purebred sheep in California. While my experience has been very limited so far, I shall endeavor to keep nothing but purebreds in the future. At present I have only the thoroughbred Hampshire Downs. I bought my foundation stock from Mr. Harold of the Four Oaks Stock Farm of Woodland a year ago last fall. I did not have very good luck with them, as I had nothing but the lambs to start with, but last fall, as you published in your paper, I bought the remainder of the Four Oaks flock and raised some beautiful lambs, which I think as large as I ever saw of their age. It costs most to get a start in purebreds, but they are no more trouble to raise and one can always find a sale for fine stock, as I have found out in other kinds of stock, and it is certainly a great deal more pleasure to have them on your farm than scrubs. Some of my ewes will weigh 250 pounds, and I don't think any of them will weigh less than

200 pounds. I have never seen larger ewes, though I saw a larger buck, which weighed 310, while mine weighed only 258 as a 2-year-old. I am not prepared to say which is the most profitable breed of purebreds, but I believe the Merino best on ranges and in large herds where they are herded, while on small farms where there are fences I think the Hampshire Downs and Shropshires are good.

H. V. TRAYNHAM.
Colusa County, Cal.

In sending order and copy for a new advertisement to start in the July issue of the Journal, T. S. Glide, breeder of Shorthorn cattle and the famous Blacow-Roberts-Glide French Merinos and purebred Shropshire rams, says that the sheep and cattle are doing fine, and that prospects for a good ram trade are much better than usual. He has an exceptionally nice lot of rams for this season's trade, and they are in fine condition. Read Mr. Glide's new advertisement.

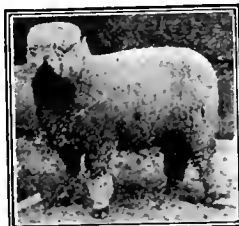
Shipments of mutton sheep from Kings and Fresno Counties are particularly heavy at this time. Prices are good, and sheep men generally are having a good season.

P. A. Cox, Hanford, Cal., shipped four cars of mutton sheep to Independent Market, Santa Cruz, June 13th.

A large portion of the wool production of the northern counties of California was contracted for this season before shearing time, the price received by the producer ranging around 14 and 15 cents per pound.

When your horse is afraid of anything, if it is possible, drive slowly up to it and let him look at it. Never whip him when he is frightened. If you were afraid of anything, whipping would not take away your fear, but kind words might. It is the same with your horse.

Love your horse and he will love you. Kind, gentle, encouraging words will make him want to obey you. Try them, and use the whip as little as possible and never in the stable. Never hold the whip in your hand and keep worrying the horse with it. That is keeping him in misery.



First Prize Ewe Lamb at Omaha

BISHOP BROS.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

A PROTEST AGAINST DROPPING GRADE SHROPSHIRE FROM PREMIUM LIST.

The Journal has received from Bishop Brothers of San Ramon a copy of a letter sent by them to the Board of Directors of the State Agricultural Society, and it gives us great pleasure to reproduce the same for the information and benefit of our many readers who are interested in the Shropshires.

It is surely an injustice against the Shropshires when the grades of the breed are barred from participation in the awards when grades of other breeds are admitted.

San Ramon, June 10, 1912.
To the Board of Directors California State Agricultural Society, Sacramento, Cal.

Gentlemen—We notice that grade Shropshires have been taken off your premium list this year. You, however, give premiums to three classes of Merinos in which registration is not required, namely, Class 1B American or Spanish Merinos; Class 2B Delaine Merinos, and Class 3B Rambouillet or French Merinos. The object of this letter is to call to your notice the importance of the Shropshire in California, and to endeavor to convince you the Shropshire grade deserves to remain on your premium list, and is equal in importance if not superior to the three Merino classes.

Among the owners of common Merino sheep in California and other states it is the general practice to cross with Shropshire rams, the cross making a fine early maturing mutton sheep which yields more wool than the common Merino. The rams used in this cross are grade Shropshire almost entirely, for the average raiser of common sheep will not pay the price that has to be charged for a registered animal. A large number of grade Shropshire rams are shipped yearly to Oregon, Nevada and all parts of California. In the East and Middle West the Shropshire is the leading breed. The entry lists of the Eastern and Middle Western live stock shows and fairs have more Shropshire entries by far than any other breed.

The reason for this is that the Shropshire is the "farmer's sheep." He matures early, is easily fattened and produces the best mutton and a heavy fleece of superior quality. Added to this the Shropshire ewe is a most excellent mother and generally rears twin lambs.

The conditions that prevail in the East will soon prevail here. The large ranches are rapidly disappearing and the small farmer is here to stay. There are many flocks of Shropshires in California and their number is increasing rapidly. Indeed, the 1911 Official Catalogue of the California State Fair tells the same story. There were 139 individual sheep entered. Of these thirty were grade Shropshires, leaving 109 registered sheep divided as follows: French Merino 12, Shropshire 30, Hampshire 17, Southdown 13, Dorset 6, Cotswold 14, Lincoln 12, Persian 6 and Cheviots 3.

Do you not think, under the circumstances, that you are warranted in keeping a grade Shropshire class on your premium list? Yours respectfully,
BISHOP BROTHERS.

HAVE SHEEP A PLACE ON WESTERN FARMS?

The following is a paper presented in animal husbandry by Harry S. Reed of the Utah Agricultural College, and it is here reproduced because it applies as well to all Western states as it does to Utah:

In taking up this subject, the keeping of sheep on the farm the year round without access to range is understood. Raising purebreds, which phase of sheep husbandry has been successfully tried on our Utah farms, is not included. But have sheep raised and bred for mutton a place on our farms? This branch has not been tried out in Utah to any extent. Sheep kept on the farm must have the care of a careful shepherd who thoroughly understands his business before we can call it a fair trial. As sheep farming in America is new, and especially so in the West, we can only get this knowledge by experience and careful study of the subject.

The traveler in England, Scotland and parts of France and Germany is impressed with the importance of sheep farming in those countries, where many farmers keep them in large numbers and raise scarcely nothing but sheep on their places. In Hampshire it is not uncommon to see as many as 2,500 head on a farm of 1400 acres. Sheep raising has been successfully practiced in France on land worth \$250 an acre. Many sheep are raised on farms in Ohio, Michigan, New York and Pennsylvania. The thickly populated states of New York and Ohio have 675,000 and 2,300,000 sheep, respectively, as compared with

San Ramon Shropshire Flock

PUREBRED AND GRADE RAMS ALSO EWES, FOR SALE. INDIVIDUALS OR CARLOAD LOTS.

We will sell 120 Grade Ewe Lambs originally selected for our own breeding flock. All by imported rams out of ewes from which we sell our grade rams. We consider them the best lot of grade ewes we ever had. They are fat and in fine condition. Owing to shortness of feed we will sell them at a very low figure.

Our grade flock at the State Fair, 1911, took every first and championship.

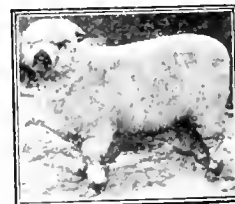
PRIZES WON BY FLOCK, 1911.

California State Fair—Thirteen out of fifteen first prizes and all of the four championships.

Omaha—First and second ram lambs; first and third ewe lambs.

Our grade rams are raised on the open range.

SAN RAMON, CALIFORNIA



First Prize Ram Lamb at Omaha

The Alfalfa-Leaf Weevil

The Live Stock and Dairy Journal—I have read an item in our local paper regarding the alfalfa weevil, which, it is feared, will get into this State from Nevada. How can we detect this weevil, and how combat the pest?—P. C. C., Willows, Cal.

Answer—For the benefit of P. C. C. and for the information of all our other readers, most of whom are directly interested in this matter, we herewith reproduce a bulletin recently issued by State Horticultural Commissioner Cook. It will be well for subscribers to preserve this article so that they will be in a position to assist in keeping the weevil out, and for reference in the event that the weevil gains a foothold in this State at any future time.

The alfalfa weevil (*Phytonomus posticus* Gyll.) one of the snout beetles allied to the Cotton Boll-weevil is a fearfully threatening evil at our very doors. Its chief food plant is our most valued forage plant, alfalfa, its dispersion is rapid, its despoliation terrible. We can not quarantine against it. Its native home is the whole region about the Mediterranean Sea, where it is held somewhat in check, doubtless by its insect enemies. So far as we know it jumped from its native haunts to Utah at one bound. How much easier from Utah to California. The first year of its attack hardly attracts attention, which adds greatly to the danger of introduction. In subsequent years its spread and ruin are fearful to contemplate. First noticed in Utah in 1904, it now covers more than one hundred square miles, and the loss to the alfalfa crop in the region infested is from one-third or one-fourth to total. Once thoroughly established in California its spread would be certain and its damage ruinous. Its prolificness is fearfully great, each female laying more than two hundred eggs. Millions of the weevils crowd together in the fields and small as they are are often piled up like haystacks. It sometimes covers barns almost completely and its annoyance to men working in the fields crawling on them, often under their clothing, is something fearful. If we can not keep it out of California, and the prospect is dark, indeed, we may hope to stamp it out upon its first advent to our alfalfa fields, and at all subsequent introductions. So all must know it and understand its terrors so as to detect and extirpate it as soon as it comes.

The mature insect is from one-eighth to three-sixteenths of an inch long, is brown, flecked with gray or white. It becomes darker with age, because of the scales covering it being removed, almost black, mottled with gray.

It will be found in the fields from May to July, as it comes from the pupa on till the next April, May or June; thus the adult weevil may live considerably more than a year. They are active in early summer, readily take wing, and may fly long distances, aided by the wind. They are often found in cars, even sleepers, and hide in any concealed place during hibernation, and so may be carried in freight and hastened to pastures far distant from their birth place. This explains why quarantine is impossible to stay this intruder. It hibernates in some concealed place—in alfalfa, weeds, under rubbish, etc.—from late summer till the next spring, when it pierces the stem and lays its two or three hundred eggs. One plant may receive over one thousand eggs. The egg punctures are often a serious injury to the young plant.

The larvae which comes from the eggs are white at first, very minute, footless, like all weevil grubs. Later

they are green and always curled up. They feed on the buds, stems and leaves, will, when numerous, destroy utterly the first two cuttings and so virtually all, for with such serious defoliation for so long a time the third cutting will amount to very little or nothing. With summer the larvae or footless grubs seek concealment in the stubble or dead leaves and form a spherical cocoon of coarse fibers in which they pupate. They remain as pupae ten or twelve days, when the mature weevils come forth.

We see that from June to April the insects are virtually all in the adult state, are active at first, are easily carried afar by cars, autos, freight packages, flight (aided by the wind), shipped in hay, carried with seed in sack or borne down by streams. After they are settled in hibernation they are easily carried in freighted goods, where they are concealed or in hay or seed. In spring and summer the

tremendously in this campaign of enlightenment, then the peril will be known at once and an invasion will likely be discovered immediately and not be delayed, else the scourge will become established. Patches of alfalfa, run wild, especially along the railroad, must be thoroughly inspected at frequent intervals by Horticulture Commissioners, inspectors and alfalfa growers, and the presence of the weevil or any suspect must be reported at once to the County Commissioner, the State Commissioner of Horticulture or the State University, that the stamping-out process may be commenced instantaneously. At this time it is possible, practicable and not seriously expensive. This article is written to give this information. It is imperative that every alfalfa grower should become a thorough student of this subject.

To Stamp Out.

If a small area is infested, covering the plot, in case the stubble is too green to burn, with straw or inflam-

The Live Stock and Dairy Journal—Can you give me advice as to what to do to get away with the ants and mice in my garden? They are eating off the roots of vegetables.—H. C. S., Denning, New Mexico.

Answer by Albert J. Cook, California State Commissioner of Horticulture—The best way to rid your garden of mice is to poison them with strychnine. Take a small orange twig, of which mice are fond, open the bark a little and place a small quantity of strychnine in the opening, or else use a few raisins in which a very small amount of strychnine has been placed. Put the raisins or twigs in the places where the mice gather and you should rid your garden of them quickly.

To get rid of the ants, dig a small hole about five or six inches deep in their nest or runway and place in the bottom of the hole one tablespoonful of bisulfid of carbon. Fill the hole with clay well packed as the bisulfid vaporizes rapidly. This treatment should do away with the ants.

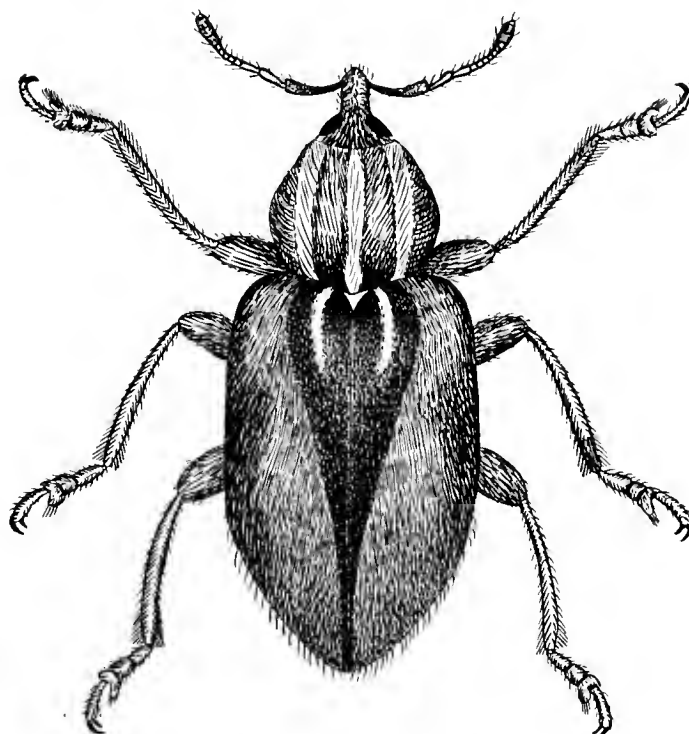
The Live Stock and Dairy Journal—Please advise me which of the following is the more beneficial to the soil: To plow for summer fallow ground that has on it a heavy growth of green filaree, bur-clover and oats, to plow it before the above-named grasses have attained and considerable growth.

Answer by G. W. Shaw of the University of California—So far as benefits to soil are concerned it would be the better practice to allow a heavy growth of filaree, bur-clover, etc., to grow up and then plow them under deep in the early spring in order to form humus to improve the moisture-holding conditions of the soil.

While meat is an excellent food for egg production, on account of its nitrogenous quality, there are a number of other feeds which also are high in nitrogen, among which may be found linseed meal, malt sprouts and gluten feeds.

pests, their work and habits, that all may know of any introduction instantaneously, and that the stamping-out process be immediate and thorough. Let no one fail to give information at once to the State Commissioner. County Commissioners, all their inspectors and all interested are earnestly urged to give this bulletin widest circulation and see that its contents become known to all.

In the preparation of this article free use has been made of Circular No. 137 of the United States Department of Agriculture (Webster, F. M.), and the Bulletin No. 110, Utah Agricultural Experiment Station (E. G. Titus). Both of these bulletins are very excellent, and the latter is especially complete.



Alfalfa Leaf-Weevil. Adult Female—(Much enlarged. Original).

larvae are working their terrible destruction. In May the insect may be found working in the alfalfa in all stages—eggs, larvae, pupa and imago.

A strict quarantine against hay and seed would aid somewhat to keep these pests from entering a new, uninfested locality, but would not prevent invasion from cars, freight or flight. It is wise and we require all seed in the sack coming from Utah to be fumigated, especially if it comes from an infested locality. To fumigate, the seed is placed in a close, air-tight vessel, carbon bisulphide is then added at the rate of one pound per thousand cubic feet, when the vessel is at once closely covered. Remember that this liquid is highly inflammable and explosive.

Our danger is imminent as these weevils can easily be brought to Southern California via the San Pedro and Salt Lake Railroad and into Northern California via the Southern Pacific Railroad. From the nature of the case, as depicted above, there is no possible sure way to prevent such an invasion.

All our alfalfa growers must inform themselves thoroughly regarding the appearance and entire life history of this greivous pest.

Our County Commissioners can aid

mable material and firing the same will destroy the weevil, larvae, pupae and adults. Cutting the alfalfa and permitting it to dry would preclude this work. This would need be done in June when the insects are nearly all in the stubble. This is emphatically in order when the insects first come and in patches run wild, especially along the railroad track. Cutting the first and second crops and burning, as above, or, after cutting, dragging the field with a brush drag will kill most, but would not, it is feared, ever exterminate. Spraying the alfalfa with arsenites will also kill many. Of course the time to do all this is in June, after the eggs are virtually all hatched and before the adult weevils have migrated from the fields.

Most Important Suggestion.

We have reason to believe that as yet this weevil is not in our State; if here, it is doubtless along the railroads already mentioned. We know that the danger of this introduction is imminent and alarming. I repeat: Our safety imperatively demands that all growers of alfalfa, all County Commissioners, and all interested in this most important forage crop become at once thoroughly acquainted with the



The Alfalfa Weevil at Work.

Questions and Answers

EDITED BY A. H. CURRIER.

A valuable and instructive feature of our Poultry Department is "Questions and Answers." Any of our subscribers desiring advice or information upon any matter pertaining to poultry raising will please address Poultry Editor, The Live Stock and Dairy Journal, Sacramento, Cal., and answers will be printed in this department.

in the nest boxes. To get rid of them:
First—Clean out the nest boxes.
Second—Cleanse them by using a good spray.

Third—Scatter a spoonful of naphthalene flakes or a few moth balls in the bottom of each nest.

Fourth—Put in the straw or litter on the nest.

Mites and Ticks.

Mites and ticks usually do not stay on the fowls during the day. They go on at night to feed, then seek some crack or cranny or the underside of the roost to spend the day.

Paint the underside of the roosts and all the joints where the roosts are supported with three parts heavy crude oil and one part crude carbolic acid (testing 20 per cent). Any good spray will kill the mites and ticks, but not the eggs, so in spraying, spray at least twice, three times is better, at an interval of two or three days, thus killing the mites and ticks and killing those that hatch out later.

Kerosene Emulsion.

Dissolve one pound cheap soap in one gallon hot water, add to this two gallons cheap kerosene and stir well till cool (or pour from one bucket to another till cool); stir in two ounces crude carbolic acid. To each gallon of this mixture add eight gallons of water and keep well stirred while using. It is more effective when sprayed on under pressure. It should be put on twice the first day about an hour apart. When the eggs have hatched, or about the third day, spray again at least once, but twice is better.

A Good Disinfectant and Insecticide.
Three parts kerosene, one part crude carbolic acid (testing 20 per cent cryslic acid). For best results spray on under some little pressure.

Sickness.

Most of the sickness among fowls is caused either by draughty or overheated houses or by dirty houses and yards. Houses can be disinfected by a good spray, but ground only by a green crop. In case of sickness thoroughly cleanse and disinfect house and yards.

Chicken Pox.

Rub off scales and apply carbolated vasoline.

Roup.

Spray under the roosts after the fowls are sound asleep for three nights with the kerosene and crude carbolic acid spray. Use a fine spray and about one gallon to one hundred hens. Repeat at intervals as needed. Put sickest fowls in hospital and every day dip heads in a strong solution of permanganate of potassium, or a solution of one ounce of camphor gum in one quart of kerosene. Put a little blue-stone or carbolic acid in the drinking water.

Scaly Leg.

Wash thoroughly with kerosene and apply vasoline.

QUESTIONS AND ANSWERS.

(1) Do hens lay better with or without the males? (2) At what age should pullets begin to lay? (3) How is the best way to breakup broody

hens?—L. J. W., Modesto, Cal.

Answer—(1) It has been found by experience that hens lay equally as well where no males are kept. The greatest advantage is in the keeping qualities of the infertile eggs from such hens, and where hatching eggs are not wanted you save the extra expense of keeping the males. (2) The age pullets begin to lay depends much on the care and feed, as well as the variety. As a rule Leghorns mature the youngest, often laying at four to four and one-half months; but the highly fed pullets, forced to lay so young, will never get the size nor have the staying qualities of those reared in the ordinary manner. Pullets having six months to mature for laying make better hens. (3) You should have small houses with raised slat bottoms in which to confine your "clucks." Four or five days' confinement is usually enough to break up their broodiness. Provide all the water they wish and light feeds of grain.

Do turkey and duck eggs do as well as chicken eggs when hatched in an incubator?—E. D., Glendale, Ariz.

Answer—Yes, they hatch fully as well. If anything, I have had a larger proportion of Pekin and Indian Runner duck eggs, as well as White Holland Turkey eggs, than from hen's eggs. When using incubators give all the moisture you can the fourth week, both by evaporation and sprinkling. Ducklings are easily reared in brooders. Directions for care and feed have been published in former numbers of this journal. Most people have better success by giving baby turkeys to hens when hatched, but in small lots, say 25, with good care and attention they can be reared in a warm brooder.

The Live Stock and Dairy Journal.—I would like a little information regarding my hens. They are White Leghorns, fine, healthy looking chickens. Suddenly they look droopy, tail seems to droop, they get lame in one leg, and in a few days are dead. This has been going through the flock for a year or more. If several had it at once I would think it a contagious disease, but there are times when it will be several weeks, possibly a month, from the time one dies until another takes it.—G. C., Manchester, Cal.

Your description is not definite enough to determine positively the trouble with your fowls. The hens may have bowel trouble, indigestion, or possibly some stoppage of the egg passage. It may come from some weakness or want of vitality in the stock.

Give a tablespoonful of Epsom salts in their mash three days in succession, then give an iron tonic, Douglass mixture or copperas solution in their drinking water. Do not forget the salt in the mash. Also add some mustard or cayenne. I take it you give your fowls proper feed and care, and if trouble does not cease with this treatment you should dispose of the stock and procure new blood.

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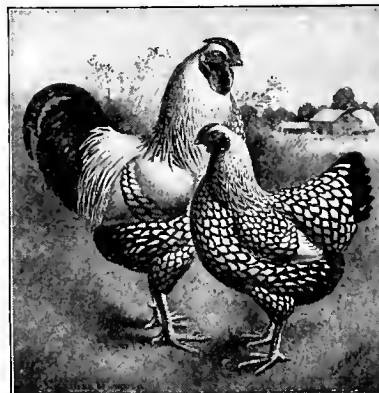
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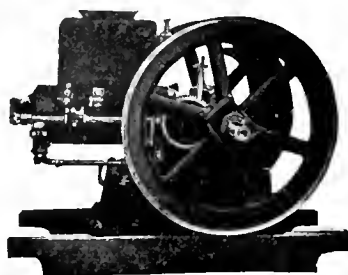
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THE LIVE STOCK and DAIRY JOURNAL

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

AUGUST, 1912



Sir Segis Hengerveld De Kol (right) and First Son, Sir Segis Hengerveld of Stratford (left)
Owned by Stratford Dairy Farm, Lemoore, California

AGRICULTURAL PUBLISHING COMPANY, SACRAMENTO, CAL.

The Live Stock and Dairy Journal

An Illustrated Monthly Publication for the Advancement of the Live Stock, Dairy and Poultry Industries of the Pacific Coast.

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If you want to buy or sell any stock or merchandise in the great live stock, dairy and poultry centers of the Pacific Coast, get in touch with our advertising columns. We believe all advertising in this paper to be from persons or firms of the highest reliability. Every effort is made to protect our readers against misleading representation. We shall at all times appreciate evidence that advertisers have acted otherwise than in accordance with principles of strict business integrity.

The Journal is issued on or about the 5th of each month. Copy for all reading and advertising matter must be in our office not later than the 25th of month preceding date of issue.



PROPER THAT STATE SHOULD TAKE LEAD.

Under the present state administration some very commendable steps are being taken toward putting the agricultural operations carried on in connection with the various state institutions under practical and business-like management.

The building of sanitary dairy barns that will be within reasonable cost and serve as models which farmers may follow, the scientific feeding and breeding, testing and weeding in connection with the dairy herds and the adoption of scientific methods in other branches of farm work assures a more economical and satisfactory administration of affairs at these institutions. It is proper and necessary that the State should set the example in advanced agricultural practices.

WEED THEM OUT.

If some of the dairymen who are complaining about the high cost of feed stuffs would give more attention to the kind of cows that are consuming the feed they would be better off. We don't blame anyone for complaining about the cost of maintaining a cow that yields barely enough to pay for feed and labor, but would rather see a man set about weeding out the poor producers and building up a herd of profitable cows. It is useless for the dairyman to attempt to control the cost of feed stuffs, but he has the power to make his feed and his time yield the highest possible returns.

THE NEVADA QUARANTINE.

State of Nevada, Executive Department.

A Proclamation by the Governor.

Whereas, It has been made to appear to me by satisfactory evidence that the reasons no longer exist for that certain quarantine established by me on the 14th day of May, 1912, prohibiting the importation into this state of cattle from that portion of California lying south of Mount Diablo base line, infected with, or which has been exposed to, certain contagious or infectious diseases.

Now, therefore, I, Tasker L. Oddie, Governor of the State of Nevada, do, by authority in me vested, declare said quarantine and prohibition of importation of cattle from the said district this day raised and terminated. Given under my hand and the Great Seal of the State of Nevada, at the Capitol in Carson City, this 29th day of June, in the year of our Lord one thousand nine hundred and twelve.

TASKER L. ODDIE,
 Governor.

By the Governor:

GEORGE BRODIGAN,
 Secretary of State.

By Harold P. Hale, Deputy.

The raising of the Nevada quarantine against California cattle within six weeks after it had been declared by Governor Oddie is proof enough that there were never any conditions to warrant a quarantine. Had there been it would not have been possible to remedy them in so short a time. As stated in our editorial in the June issue, there were questionable motives back of this quarantine, and Governor Oddie is to be commended for taking prompt action in revoking his quarantine order as soon as he was convinced of his mistake. This was upon the showing by State Veterinarian Keene of California, who was confirmed in his stand by the United States Department of Agriculture.

Had California wished to have retaliated we could have quarantined against Nevada stock with much more good grace than Nevada quarantined against this State, for the reason that Nevada has no sanitation officers, and there is no system of controlling animal diseases.

A California quarantine against Nevada stock would have a serious effect, because Nevada beef goes to San Francisco, Nevada horses find a market in California and many Nevada cattle and sheep seek California ranges.

But California was too big for anything like that, and took the only real manly course open under the circumstances.

DR. THOMAS HUNT NEW DIRECTOR OF AGRICULTURE, UNIVERSITY OF CALIFORNIA.

Dr. Thomas Hunt, Director of the State College in Pennsylvania, has been appointed Director of the most extensive department in the University of California, that of agriculture.

Dr. Hunt will be Dean of the College of Agriculture and Director of the Agricultural Experiment Station, and in these capacities will be the executive and administrative head, not only of the departments of instruction in Berkeley (agronomy, cereals, plant pathology, agricultural education, animal industry, etc.), but of the various outlying scientific stations associated with the College of Agriculture—the station at Whittier for the study of plant diseases, at Riverside for citrus fruits, the Imperial Valley station, the University Farm School at Davis and the forestry stations at Chico and Santa Monica.

Dr. Hunt is recognized everywhere as one of the four or five great agricultural leaders and teachers in the country. He is about 50 years of age,

and has had the widest experience in his field. He was graduated at the University of Illinois, grew up as a teacher there, was Dean of the Agricultural Department of the Ohio State University, was then selected by Professor Bailey, when he entered upon his directorship at Ithaca, to be his leading professor and his understudy in executive management. From Cornell he went to Pennsylvania State College in 1903.

Dr. Hunt is eminently a man of affairs. He is a great organizer, a great administrative head. He recognizes how great the field here is, and he comes here because he has been assured that the President of the University and the Regents wish to make this positively the best agricultural school in the country.

Dr. Hunt will come to Berkeley and take active charge of the Agricultural Department and station on October 1st.

At a meeting of the Executive Committee of the California Live Stock Breeders' Association June 19th, resolutions were adopted declaring against the establishment of union stock yards for San Francisco.

The action of the committee seems to have been hasty and premature. We are unable to find that there has been any movement toward the establishment of such stock yards, and do not believe that there will be anything done in that line very soon.

It has been well said that a farm can never rise above the level of its owner.

THE CALIFORNIA PUREBRED SIRE LEAGUE

Breeders and farmers who have not yet signed the pledge of the California Purebred Sire League are urged to sign their name to the pledge on this page and mail it to the Secretary, R. D. McFarland, 423 J Street, Sacramento, Cal.

The League is a voluntary, non-incorporated body, the aim of which is promotion and education in the cause of BETTER STOCK. Sign the pledge now:



California Branch National Purebred Sire League

OBJECT: The improvement of the live stock of the State and Nation by the use of Purebred, Registered Sires in place of those of grade, mongrel or scrub breeding.

MEMBERSHIP: All persons who will pledge themselves to the exclusive use of a Purebred Sire by signing the Pledge Card of the League, and who pay the membership fee of one cent.

Pledge: I hereby pledge myself:

- (1) To use none but a Purebred Sire in the breeding of all farm animals.
- (2) To advocate the general use of Purebred Sires.
- (3) To work for the betterment of Purebred Sires in breed-character, individual excellence, soundness and prepotence.
- (4) To discourage the use of grade, mongrel or scrub sires, and all dams, irrespective of breeding, that are diseased, hereditarily unsound or otherwise unfit in conformation and character.

In the presence of a witness I hereto attach my signature to the

above Pledge this.....day of.....in the year of 1912.

Witnessed: Signed:.....

Address:.....R. D.

THE LIVE STOCK and DAIRY JOURNAL

Volume 11

SACRAMENTO, AUGUST, 1912

Number 8

Dairy Industry Makes Substantial Progress in Arizona

Twelve tons of alfalfa to the acre is the report received from Arizona. No one ever thought of Arizona as a dairy country, but since the completion of the great Roosevelt dam some interesting changes have taken place on the lands under irrigation. There are 240,000 acres in the wonderful Salt River Valley, where irrigation has reached the most perfect stage. This valley is the agricultural center of Arizona, and among the many advantages it offers to the dairyman is that great advantage of "green feed the year round." Here the staple crop, alfalfa, is supplied with all the water needed at all times of the year.

The great Roosevelt dam, with a lake twenty-five miles long, insures this plentiful supply of the necessary water. Nature has also been kind and supplies in addition a climate that makes it possible for stock of all kinds to remain out of doors throughout the year. No barns for the storage of feed are necessary.

On the ranges of Arizona there are large herds of live stock, numbering in all about one million head. The feeding of these cattle, or rather the finishing of these range cattle for market purposes, is done chiefly on the alfalfa fields in the Salt River Valley, and very quickly after the stock is put on this splendid forage they are ready for the butcher. The cattle are also grazed on the fields of grain during

the cooler winter months. This is done in order to prevent the grain from growing too rank. This feed is very fattening and comes at the period of the year when the alfalfa makes its slower growth.

For twenty-five years there has been a steady improvement in the breeding of stock. Purebred bulls have been imported in numbers, with the result that today the ranges in Arizona are stocked with animals which are equal to any in the whole country. For fattening on alfalfa, a conservative farmer will allow three steers to two acres of alfalfa. Two head to the acre is a common practice, but the first is estimated to be in general use. The plan of allowing the cattle to graze on the alfalfa has been found too extravagant when compared to methods in other sections. At the present time there are being installed throughout the valley systems of feeding which are proving extremely economical in point of expense and results. Often times there are over 35,000 head being fattened for market in the Salt River Valley.

But it is of dairying that we wish to speak more fully in this article, and probably the best way to do it is to let a rancher who has been in the Salt River Valley for twenty years tell his own story. Mr. C. T. Hirst, in his report, says:

"I have a very good Jersey cow that for the last three seasons, begin-

ning with her first calf, when she was less than 2 years old, has returned from \$100 to \$125 per season for milk sold, besides all the milk used by a family of from four to six people. This cow is fed entirely on dry feed, having all the alfalfa hay she can eat and about two quarts of bran night and morning. During the month of November, 1911, I sold \$33.75 worth of milk and the family used from four to seven quarts of milk per day. The hay cost about \$7 and the bran about \$3. The milk was sold at the regular dairy price of 8 1/3 cents per quart. One herd of ten high-grade and purebred Jersey cows that I know of has averaged a little over one pound of butter-fat per day per cow. Some of the best cows in this herd give over 500 pounds of butter-fat per year, which sells at from 30 to 38 cents per pound, thus making the best cows in the herd return \$170 per head per year, or an average for the entire bunch of \$124 per cow per year. The average cost of feed for this herd has been \$2 per month per head, and the cost of milking is about the same, leaving the net returns for the ten cows for one year \$860. The demand for sweet cream at the various mining camps and towns in Arizona is so large that a great deal of the milk from the Salt River Valley can be used in this way and, of course, the highest price is paid for cream delivered in this manner."

The receipts from another herd of dairy cows, grade Jerseys with about 10 per cent Durham blood, are as follows:

During 1910 this herd consisted of sixteen cows and five 2-year-old heifers; during 1911 of fourteen cows and five 2-year-old heifers. Generally the evening's milk was sold at retail. The price received for this milk during 1910 was 7.8 cents per quart; during 1911; 8 1/3 cents per quart. The morning milk was made into butter, most of which was also sold at retail. The yield of milk during 1910 from the above herd was 13,870 gallons, the sales being as follows: Milk, 4550 gallons; cream, 1105 quarts; butter-milk, 438 gallons; butter, 2417 pounds. Milk used in the house was about 500 gallons, and the butter used in the home about 125 pounds.

During the year 1911 the yield of milk was 13,650 gallons, the sales being as follows: Milk, 4972 gallons; cream, 1182 quarts; buttermilk, 324 gallons; butter, 2275 pounds. The amount used for home consumption was about the same as during the previous year.

The receipts for milk, cream and butter milk for 1910 was \$2006, for butter \$908, for calves and surplus stock \$420, making a total for 1910 of \$3334. During 1911 the milk, cream and butter milk sold amounted to \$2183; butter, \$810; calves and surplus stock, \$465; total, \$3455. The feed bought for 1910 amounted to a little less than \$1000; in 1911, \$820, leaving a new credit to this farm of \$2334 for 1910 and \$2635 for 1911. The farm contains about twenty-five acres of producing land; and in the summary of receipts there has been no account taken of the milk or butter consumed in the home.

This herd of cows is worth \$2000, and the entire work and care of the herd has been done by one man, giving splendid returns for both the work and the money invested in the small farm.

There are a number of splendid herds in the Salt River Valley. The two instances given above are of high-grade or purebred Jersey stock, but there are Holstein, Ayrshire and Durham herds in the valley that we believe would make equally as good showing as the instances given.

It has been demonstrated that in Salt River Valley the ideal way to handle alfalfa for dairy cows is to cut and feed it to the cows green. In this way, while it takes a little more work, a given number of acres will feed at least double as many cows as where they are allowed to run on the pasture.

There are several splendid creameries in the valley which are ready at all times to take the milk from dairy farms, going to the farms and getting the cream, which has been separated. In this way the milk may be kept at home to feed calves or hogs. For this reason it is not necessary that a dairy farm should be located in the immediate vicinity of Phoenix, as these creamery wagons go to the extreme parts of the valley.

We have the record of one Jersey cow, which was fed entirely on pasture



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One of the Greatest Engineering Achievements of Its Kind in the World. Water Impounded by This Dam Irrigates Thousands of Acres of Rich Arizona Soil.



THE DAIRY



Selection and Care of a Sire

(Written for The Live Stock and Dairy Journal by T. J. Gilkerson.)

In the selection of the sire, as in other things, there are always various conditions to be taken into consideration. You cannot lay down very many set rules that will cover all cases, but there are a few essential features which should always be looked out for and can be observed no matter what breed or what particular kind of an individual you may want. In the first place, he should be of a distinct breed, as you can never get anywhere by breeding to anything but a purebred sire. Secondly, he should be in good health and of good general dairy conformation. Next he should be from good producing ancestry. Then next, you should strive to get an animal that shows strong points where your animal shows weak ones, as it is in this way that you can best get at correcting the faults in your herd. For instance, if your cows are generally poor testers you should get an individual whose ancestors have been high testers, or if your animals are generally small and fine-boned get a larger and coarser-boned sire. Then, too, he should be true to his breed type as far as possible. The general rule is to wait until you are in need of a sire before purchasing him, and then often you will have to take just what you can get.

The only true way to judge a bull is by his progeny, as that is the object in mind in purchasing a sire. A bull is not what you want unless he is the getter of good progeny, and for this reason if you can get hold of a bull that has daughters in milk that have proven good then you know just what you are doing. However, there seems to be a general prejudice against the old bulls, and it is as well to be a little careful about purchasing them, but if they are not too old for service and are still sure I do not see any objection to them, except that they might be ugly, but on the other hand many of the young fellows will soon become so. One must be prepared to handle ugly bulls if he is going to remain in the business, as you often find them among the best sires. I once heard a prominent breeder ex-

press himself as having no use for an ugly bull, but when he afterwards found that some of the greatest sires were ugly fellows he said that he would have to take back his statement. Purchase an old bull if you can get one at a reasonable figure, but be sure that he is a good one and a sure breeder. You can often purchase them to much better advantage than you can the young ones, because when a breeder uses one as long as he can in his own herd he is glad to let him go. Have your bull looked up some time before you need him instead of following the general practice among

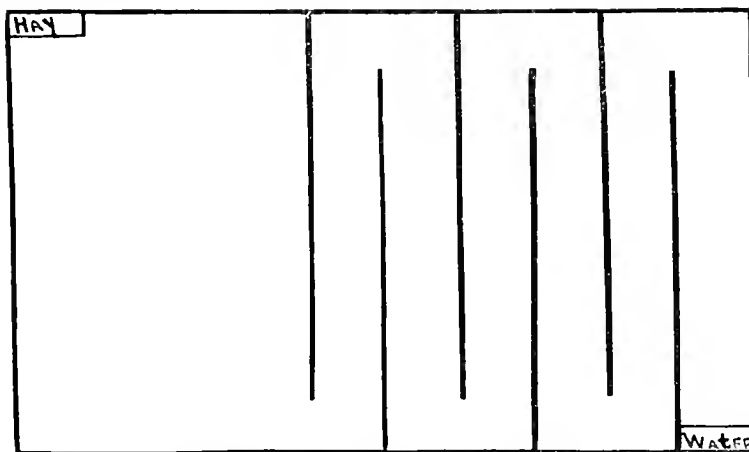
and then as soon as convenient and practicable get him under your own care and feed him well and handle and develop him according to your own ideas. And in doing so keep him under your own control at all times. Handle him lots and handle him in such a way that you can catch him and lead him around any time you wish to do so. If he gets to a point where good fences will not hold him put a ring in his nose, take off his horns, and if he still bothers the fence, build a smaller pen that is too strong for him to break. This pen should either have the posts very close to-

man who makes a habit of hauling his wood up from a nearby piece of timber, and I know of others who pump water every day. Such exercise is the very best thing for the bull. Of course, if he is so ugly that men are afraid to handle him, and it often does become dangerous work, especially with bulls that have not become accustomed to being handled, then I should resort to some other means of exercising him. I have seen and heard of several different devices for accomplishing this, but the best way, or at least the one which appealed to me the most, was to build a long pen or else a shute running from the pen to his watering place so that each time the bull wanted a drink he would have to walk the full length of the pen or shute to get it. This pen or shute would be more economical and take up less space if built in the manner suggested in the accompanying cut.

Never make a practice of allowing the bull to run with the cows, as this is very bad practice, especially on a large dairy. The bull will handle so much more service where he is kept away from the cows, and then, too, you have so much better chance to keep track of the time when your cows are bred. You can either use a shute or a small lot for breeding purposes. I prefer the shute, but I know some good breeders who prefer the lot.

One reason in favor of purchasing the young bull in preference to the old one is that you can train the young fellow to handle as you like, while the old one may be past much training.

In general, people do not spend enough money for their bulls, and what they do spend is not usually spent judiciously, as they do not investigate the breeding closely enough before purchasing. Many of them will buy a bull for his markings or for some other unimportant characteristic. I am an advanced registry enthusiast, but I should like to see all breeds adopt the annual record for their basis. When I buy a bull the only records I consider very strong are the annual ones. I want the dam of my bull not only to give a good flow of milk and test well, but also to be a persistent producer.



Plan for Lot Which Compels the Bull to Exercise.

dairymen of waiting until they are in need of the services of a bull before purchasing him. It is much better to have to feed an extra bull for a while than it is to get caught without one or have to use an inferior one. The present demand in this country for good bulls is so great that it is usually hard to find one of serviceable age.

In the purchasing of a young bull it is a good plan to speak ahead for the animal. In other words, look up the ancestors you like and speak for their progeny, but if you buy him in this way arrange for him to be cared for properly until you could get him,

gether or else 2-inch lumber should be used in boarding it up. Build it large enough to afford him room for lots of exercise. Supply the pen with fresh water at all times, and give the bull the best available food. Make a practice of catching him often and leading him around with the help of a staff, and if you can't give him enough exercise in this way put a harness on him and hitch him up to something that he can drag around. You might arrange it so that you could have some regular work for him to do, such as pulling a load of manure out to the field every day or work him in a tread mill to chop feed. I know of one

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HOLSTEINS

Two Hundred Purebred, Registered Cows, Heifers, Bull Calves.

We are offering for sale Cows and Heifers that will give from eight to twelve thousand pounds of milk per year. Many of them bred to our two great herd bulls, Sir Netherland Cornucopia and Prince Hengerveld Segls. The four nearest dams of these two great bulls average over 600 pounds of milk, 30 pounds of butter, 4 per cent fat, official records, for seven days. Conceded to be the two greatest bulls owned by any farm in the Middle West. Bull calves sired by these great bulls, some of them out of record cows.

Write us. Let us tell you more about this great herd. Quality considered, we price them right and guarantee every animal to be as represented.

WOODLAWN FARM
Sterling, Illinois

J. H. HARLAN CO.
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HOLSTEINS

Nothing to sell now, but we are booking orders for calves for future delivery.

Offerings all Sold

REGISTERED HOLSTEINS.

Orders taken for bull calves to be born of A. R. O. dams. Heavy milking strains with high average per cent fat.

LINWOOD FARM,
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Purebred Registered
HOLSTEIN CATTLE
The Greatest Dairy Breed
Send for FREE Illustrated Booklet
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A Few Choice Registered Bulls and
25 Choice Registered Heifers.
Prices on Application.

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FOR SALE

High Grade Holsteins
Cows, Heifers, Bulls
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SHORTHORNS MILK STRAIN

Attention Dairyemen!

I am breeding the finest stock in the West. Write for prices and pedigrees.

JOHN LYNCH Petaluma, California



Holstein-Friesian Dairy Herd at R. F. Guerin's Sunnyside Farm.

Transmission of Dairy Qualities by the Sire

Professor C. H. Eckles recently made the following address before the Indiana State Dairy Association, the statements being founded upon his experience at the Missouri Agricultural College:

The most forcible means I have at hand to illustrate the remarkable difference in sires is to show some results from our own herd. In 1884 the Missouri Agricultural College bought four registered Jersey cows and the entire herd we have on hand today is descended from these cows. Of course, herd bulls have been purchased from outside, but no female has been bought. Since 1892 complete milk and butter-fat records have been kept of every cow. Up until 1901 practically every female was retained in the herd regardless of her dairy qualities. These conditions give an opportunity to study the effect of sires which can hardly be duplicated anywhere.

The first bull used was Missouri Riotor 19400, a son of Bachelor of St. Lambert. There is no record indicating the dairy quality of his dam. In fact, his sire is the only animal in his pedigree known to be a strong breeder. This bull was a very weak breeder, as is shown in the chart. His daughters averaged 4,336 pounds of milk per year, while their dams averaged 5,380 pounds. The average yearly fat production of the dams was 234 pounds, while the daughters averaged 216 pounds—a decline of 18 pounds per cow annually from the dams to the daughters.

The income from ten daughters, counting milk at six cents per quart, fell \$313.20 per year behind the dams. Counting fat at 25 cents, the loss was \$45. As long as this bull remained in the herd it was going backward in production instead of ahead. Suppose the herd had had thirty daughters of such a bull. Each year we would have been \$135 behind what the dams produced, counting fat at 25 cents. If these cows were milked six years each, the total loss would be \$820. This sum would buy several good bulls.

The next bull used in the herd was Hugorotus 34447. This was a cheap bull without many tested animals in his pedigree. His mother, however, is said to have been a good cow. The

daughters of this bull were inferior to their dams in milk production, but on account of a higher per cent of fat they gained slightly in fat production.

The ten daughters fell a total of 3,770 pounds of milk per year behind their dams, but gained 100 lbs. of fat. The general results of using this bull were disastrous. In fact, the poorest animals ever in the herd were his offspring. The averages shown are made as good as they are only by the fact that two full sisters sired by this bull through some "nick" proved first-class animals.

When this herd was culled on milk records alone, nine out of the eleven daughters of this bull then in the herd were sold to the butcher. The two remaining were the full sisters mentioned. As long as this bull was in the herd, the general tendency was backward.

The next bull at the head of the herd was Lorne of Meridale 34024. This bull had a splendid pedigree from the standpoint of records and his offspring show the results. His daughters, with one exception, were all superior to the dams.

The average milk production was raised from 4,542 pounds per year to 5,571 pounds; the fat production from 220 to 280 pounds per year. At butter-fat prices the ten daughters of Lorne of Meridale returned each year \$150 more than their dams. What a difference from the results from Missouri Riotor.

If we had milked thirty daughters of this bull six years each, their product would have exceeded their dams in value \$2,700, while the daughters of Missouri Riotor went \$2,939 behind, or a difference in thirty cows six years of \$4,639 in actual income.

What would be the value of Lorne of Meridale in a large herd? We can not say, but I am convinced that as a business proposition an owner of a large herd could better pay \$1,000 for him than accept Missouri Riotor as a gift. Yet if he had been offered for sale when mature, the chances are that instead of bringing what he was worth, he would have brought little more than a bull beef price.

The next herd bull was Missouri Riotor 3rd 34587. This bull was the son of Missouri Riotor and was the only good thing this latter sire left in

the herd. The remarkable qualities of Missouri Riotor 3rd may come in part from his dam, which was the best cow in the herd up to that time, and, like the sire, the daughter of Bachelor of St. Lambert.

The best cows ever in our herd were sired by Missouri Riotor 3rd. From dams with average records of 4,609 pounds of milk, he sired daughters whose records average 7,154 pounds. The dams averaged 238 pounds of fat per year and the daughters raised this to 348 pounds.

The daughters of this bull produced \$275 worth of fat per year more than their dams. Counting this on the same basis as before, thirty cows for six years, we have \$4,950 worth of butter-fat produced by the daughters in excess of that produced by the dams. What would be the value of this bull had he been owned by an association of neighboring dairymen where he might have had one hundred daughters or more? This bull was raised on the college farm and, as is often the case, because he was a home product, instead of coming from a distant State, he was not counted of any special value and was sold from the herd without any record being made as to his purchaser, and he was never transferred. His remarkable breeding value was recognized when it was too late, and now we would like the chance of giving \$1,000 to have him back.

Minette's Pedro 50031 is the last herd bull with a sufficient number of daughters to give figures of any value. It may be observed that the herd remained practically at a standstill while he was at its head. In general, this bull was not a very prepotent bull, since we have wide variations and a lack of uniformity in his offspring. Among them are some excellent cows and some worthless. From the good dams we secured good daughters; from inferior dams the same quality of daughters.

These figures show the immense difference in the way dairy qualities are transmitted even where all are purebred animals. The selection of a herd bull is a very serious matter for the man who is trying to build up his herd and the higher developed they are in the way of dairy production, the more serious is the problem.

How to Build Up a Dairy Herd

(Address given before the Farmers' Institute of Dodge County, Wis., by S. E. Jones.)

There are some things which I wish to discuss as being of great importance to a prospective dairy breeder. These must be settled before one undertakes this great task. They are as important as the very success of the business because they form the heart and center of the business, and from these nerves of success radiate out to every detail of the breeder's duty. They involve the attitude of the prospective breeder to his business.

1st. One must truly love the humble cow. He must find in her material joy.

He must study her with sympathy and tenderness. Cherish her as he would a loyal friend. He must think cow, talk cow, dream cow and live cow until his whole soul is filled with enthusiasm for her virtues and a concern for her failings. One must have no half-hearted regard for his herd. Such regard will never move man to seek the goal of high accomplishments. If one cannot temper his business of breed with more or less sentiment I fear his calling has been missed.

2d. One must consider the business of breeding his life's work. You can not dip into the bowl of success as with a spoon. It is the work of a lifetime. What you learn today is but the starting point for tomorrow. Therefore one must fully decide that he likes the business and that he intends to stay with it. He must look upon it, not as a fad, but as a profession.

3d. Unless you have unlimited capital, do not expect immediate results. The world was not made in a day, neither can a dairy herd be produced in that time. The ideal dairy cow is an evolution, an evolution guided by the breeder in his selection of its parents for purpose and not in the haphazard manner of years ago. If you have money to buy a purebred dairy herd at the outset, my talk is not for you. I am here to help the fellow of limited means who has the patience to work and to wait.

4th. The selection and breeding of dairy stock requires a high order of intelligence. The time when a rube can become a breeder has passed. Today men only who are fired with a love of nature, actuated by a fixed purpose and endowed with patience and at least average intellect may hope to succeed.

Having these fundamental qualifications, what are the steps necessary to found a dairy herd?

1st. Get your ideal well fixed in your mind, and have that ideal a lofty one. Without a good model the most skillful sculptor can not produce a work of art; neither can a painter bring forth a picture upon his canvas for people to admire. It becomes just as necessary for you to fix upon your own model in order that all your efforts may be directed toward reproducing this ideal in the living creatures of your herd.

2d. Knowing that the characteristics of sire and dam are likely to be reproduced in their offspring, remember this law in making your first purchase.

3d. Now secure one or two of the finest females of milk-producing strain you can afford. If you can not afford a good cow, you are not ready to found a herd.

In making this selection be sure first of all that your dams come from a line of good milk producers. We hear a great deal about the dual-purpose cow. I believe this theory of the dual purpose of stock is a mistake. No such theory should hold with a true breeder of dairy cattle. To make beef one should breed beef. The same

is true of milk producers. So make your selection with this in mind. It is important also to select a breed that matures young. Other things being equal, there is no sense in waiting three years for a heifer to freshen if you can secure a strain which will freshen in less time. This is so simple a business proposition that I trust it needs no further comment. Yet many inexperienced beginners overlook this important direction. Much assistance may be gained from men who have made a success of dairy breeding. Visit with such men. Counsel with them. Study their herds. Quiz them. Get all the information from them you can, and I will say that I believe that, as a class, they are as willing, or more so, to give you the benefit of their experiences as any set of men in any line of work.

In addition to the above points, look well to the temperament of your dams. Even the temperament is likely to be transmitted to the offspring, consequently it is wise to select such as are quiet and docile in disposition.

And lastly see to it that your females are sound and free from hereditary disease. This will insure strong and vigorous offspring.

The sire has been said to be two-thirds of the herd. This statement has not been overdrawn. If you must economize in any part of the herd let it not be here. The sire can not be too good. To select any sire but the best your money can buy is to spend money foolishly. A scrub sire will reproduce a scrub calf just as surely as a purebred herd sire is likely to reproduce his quality. It follows that one should never head his herd with any but a purebred sire, and one that is bred closely in the line. He should be vigorous and strong—one whose ancestors have strong official records for at least four generations. His vigor, vitality and constitution are, indeed, very important points to be taken into consideration.

SUNNYSIDE HOLSTEIN HERD.

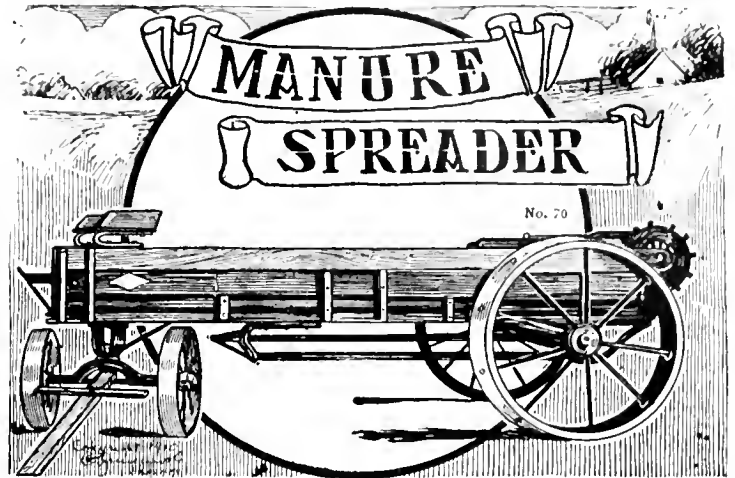
The Live Stock and Dairy Journal—There are one hundred Holsteins, all registered, in Sunnyside herd. At the head of the herd is Arcady Pontiac Wayne Hengerveld, a grandson of Hengerveld De Kol, the most famous sire of the breed. A sister of Arcady Pontiac Wayne Hengerveld, Aggie Grace Beryl Wayne, just made a record of 32 pounds of butter in seven days. I have received a young sire from the Homestead herd, owned by W. A. Matteson of Utica, N. Y. His dam made 14.13 pounds of butter in seven days at 2 years old, and his grand-dam, Jessie Maida, made 31.13 pounds of butter in seven days. His sire is from a great producing family, some of them making over 30 pounds of butter in seven days. I expect in a few years to have some very fine animals from these fine young sires.

R. F. GUERIN.

Tulare County, Cal.

Weaver Stock Farm, Brawley, Cal., recently purchased a very promising Holstein-Friesian bull. He is a grandson of King Segis and Pontiac Clothilda De Kol 2d. His sire is King Segis De Kol Korndyke, dam a double grand-daughter of Lord Netherland De Kol, making a strong combination of 30-pound blood.

In the advertisement of M. A. McLean, Modesto, Cal., in the July Journal, it was made to appear that one of the Holstein bulls he has for sale is out of Lady Bountiful Kaskin. The name should be Lady Bountiful Faskie. See classified columns of this issue.



ARE YOU UP-TO-DATE IN YOUR METHODS OF FARMING?

ARE YOU ENRICHING YOUR SOIL, OR ARE YOU TAKING THE LIFE OUT OF IT YEAR BY YEAR AND PUTTING NOTHING BACK?

The best known method of getting the best results on a crop without wearing out your land is to manure it; and unless this is done by the slow and laborious way of putting it on by hand, means an outlay of from \$250 to \$300 for a manure spreader.

We have something in the way of a spreader. It is a box that may be put on any farm wagon that is 44 inches on the bolster, and does the work that a \$300 spreader will do. The box is fitted with a traveling apron, shredder head, and picker, just like a high-priced machine, and the motion is imparted by a gear bolted on to the wheel of your wagon.

You need a spreader on your place, and there is no need of paying the high prices charged by others, as we will lay our machine down at your nearest railroad station for \$85.00.

How about it?

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721-723 J STREET,

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EVERY merchant in California wants your business. So do we. We can please you. ¶ Supplies of all kinds for the Dairyman, Cheesemaker or Butcher.

J. N. BLAIR & CO.
SACRAMENTO, CALIFORNIA

WE LEAD IN JERSEYS

Ten purebred and registered Jersey Heifers, ten purebred and registered Jersey Bulls, all strong, robust fellows, for sale. They are sons and daughters of our best milk producers, and sired by our famous herd bull. Largest herd of registered Jersey cattle in California. Write for prices and pedigrees. Also have purebred Jersey cows for sale.

Rancho Dos Rios, R. E. WATSON, Manager, R. F. D. 2, Modesto, Cal.

FOR SALE

Guernsey Cow, fresh, and some excellent purebred Guernsey Bull Calves from 1 to 8 months of age, out of producing dams.

Also, Splendid Hampshire Boars

Fit for service, and younger ones from best prize winning pens of the East.

J. W. HENDERSON, 503 First National Bank Bldg., Berkeley, Cal.

How to Select a High Grade Milk Cow

O. C. Gregg, a lecturer for the North Dakota Farmers' Institute, gives the following advice regarding the selecting of dairy cows:

"The five points to be observed in the selection of good milking cows from grade or native cows are the prominent ones that will appear in all of the milking forms of the cattle race without regard to breed. We can give these points under numerical heads.

"First—Observe with care and note as a first point that the cow we are now passing upon has a large and ample sized body. Let this body extend from a point just back of the shoulder straight down to the lower part; also let it be included between the line that we mentioned and a line that we call imaginary that will extend from the hook or hip bone straight down to the lower part of the body again. It is an excellent thing if the depth of the body is as strong or stronger at this last point as at any other point that we will call its depth. Sometimes this bodily capacity is composed to a certain extent in the length of the body. In either case we want a large, ample and capacious body. This large body in needed and must appear, for the ample supply of milk must come from much food received and digested within the area that we have noted. This food content is there taken up into the blood. With this evidence of a good supply of blood we have a good start in estimating that we will have a good supply of milk.

"Second—Look with care behind the foreshoulder and observe if the back-bone is prominent and if that part of the body which is called the crops is scantily covered with flesh; this does not mean that the animal shall be in poor condition. It only means that the animal is not inclined to use this blood to make flesh out of it. Beef cattle are full at this part of the body. We are selecting for milk. We want the ample supply of blood to go to the udder where the milk is made.

"Third—Next go to the udder and see if it be reasonably large. Do not depend upon the eye to estimate this size. Many very good udders are contained largely within the body, and their size is not apparent. You will see the fore part of the udder be it large or small. Take hold of the skin between the hind quarters. Up to the point where the skin ceases to be as loose as upon the other part of the body we can judge that the udder extends.

"One can get a fair idea of the udder attachment to the body by drawing an imaginary line from the point last mentioned to the front udder that we have seen. This will give one a distinct and positive line of attachment of the udder to the body. If that line is long, then we have the clasping form. In such a form we have nature's provision to receive that ample supply of blood that this good body will produce.

"Fourth—Now put the hand on what is known as the milk vein, which extends from the udder along the lower part of the body to both sides. At the end of this vein will be found a hole through the body wall. This hole should be large enough to take the end of an average index finger. By pressing against the wall of the body for the space of about two inches in a varying direction a second hole may be found that will be about the size of a lead pencil. Look for these holes on both sides of the body. These holes through the body are for the return of the veins which take the blood to a very great extent from the udder. Here we have an absolute fact which indicates that the blood makes its circuit through the udder, or gland, where the milk is made. We can safely reason

that from this abundance of blood we shall have an abundance of milk.

"Fifth—Last of all look and see if the eye of the animal is large and full. This largeness of the eye indicates a strong nerve system. Digestion and milk secretion is the work of the nerve system. The nerve system is the power that drives this animal milk machine.

"These five points may be called five degrees in cattle judging. We add a sixth. Use the scales and the Babcock test, and the cow has been brought to a sure cattle judgment. Any cow that will verify these six points will prove to be a good milker.

NATIONAL DAIRY SHOW ASSOCIATION.

At a recent annual meeting of the National Dairy Show Association, the Directors and officers whose terms had expired were re-elected. The Board of Directors was increased by the addition of Messrs. F. L. Ames, Massachusetts; J. R. Valentine, Pennsylvania; C. D. Ettinger, Illinois; John L. Smith, Washington; Robert Scoville, Connecticut, and Arthur G. Leonard, Chicago. The date for the dairy show was fixed for the period of October 24th to November 2d for this year's show and as a permanent period for all future expositions, and the international amphitheater has been leased.

"For the purposes of extending our efficiency the association increased its capital stock and augmented its working machinery by the addition of new blood, as the Directors, after reviewing the six successful shows held by this association confidently believe that a still greater national show is needed, and that its place and usefulness has been established beyond cavil by the results achieved by the expositions so far conducted by our association," said President Van Norman.

"Statistics go to show that the population of the United States has passed the point where our farm productions will maintain our own people and no matter how herculean the effort to re-establish our food products that low prices for any character of farm production can not again be reached. Therefore, intelligent, well-directed educational efforts to produce more and better cattle upon the farms will serve the twofold purpose of increasing earnings directly from this source and from increased soil fertility, hence more and better crops.

"As the era of brain and brawn has superseded that of brawn alone, the most enlightened and intelligent methods must be presented to our people to bring the much needed results. We believe that our exposition, where the best animals produced by the highest attainments of the breeder's art are displayed for purpose of comparison, affords the seeker for information the best possible school, and where we assemble the modern in machinery for our purposes, giving our visitors under one roof an education in all the arts—breeding, feeding and fitting and care and preparation of the products on latest lines of health sanitation. Above all we aim to teach how to obtain the maximum of result in the minimum of cost, of time, money and labor, and in so doing we believe we are undertaking a work worthy of the support of the people of this country.

"To accomplish this we have enlisted the services of Mr. W. E. Skinner, who is President of the International Live Stock Exposition, to take the management of our show. Mr. Skinner has an acquaintance with the live stock industry of this country which extends from coast to coast."

DEPARTMENT HELPS DAIRYMEN

One of the most encouraging lines of work which the United States Department of Agriculture is encouraging is the institution of herd records on dairy farms. By this means the unprofitable cow is detected and can be disposed of for slaughter. The heifer calves from the profitable cows are raised to take the place of the unprofitable animals. In this way the quality of the herd is steadily improved. The daily weighing of the milk and the testing for butter-fat enable the dairyman to feed the individual animals according to the production, and to select such feeds for the ration as are shown to give the best results.

The Department receives many letters from dairymen bearing on the value of this work. One of them writes:

"I write to express my great appreciation of the work done for me by your department.

"From the records kept I found two cows the produced over \$200 profit—one \$110.88, the other \$103.80. A 2-year-old heifer made \$97.50 net profit. I began to test with six cows. I have sold two of them, as they were unsatisfactory. I have four more that have not finished the year's test, but I will probably sell three of them and replace with registered stock.

"I built a concrete floor in my dairy barn. Have laid the foundation for a silo; have ordered stanchions and a registered bull.

"The butter I sell is put up in paste-board cartons and brings 35 cents per pound. I get an average of 28 cents for milk.

"I wish to assure you as the head of the Dairy Department that I shall help to spread the gospel of better cows, better methods of handling and more feeding of carbohydrate value.

"I shall not be satisfied until I have a dairy of ten cows producing a net profit of \$100 each. I should do this at an early date with the aid of the Babcock tester, the scales, a silo and more grain, which I have to raise this season. I am thoroughly imbued with the dairying spirit, and hope that I can repay the department for the aid given me by helping others."

IMPROVEMENTS FOR CALIFORNIA STATE FAIR.

Of the many improvements which have been brought about during the past year in the general management of the California State Fair, many of the best will be noted for the first time by visitors at the coming Fair. The casual Fair visitor probably gives little thought to the immense amount of detail work involved in handling the business of the State Agricultural Society, and in gathering the exhibits for the State Fair and providing for the comfort and convenience of the thousands of visitors and exhibitors. The bulk of this detail work falls upon the shoulders of Mr. C. Allison Telfer, Manager of the Agricultural Society, and during his first year in the position he has made vast headway toward placing the affairs of the society upon a systematic footing.

The Directors of the Society have approved many needed improvements during the past year, and are constantly seeking ways and means of making a better Fair and providing for the increasing thousands who visit the California State Fair.

We referred in a previous issue to the work being done in providing better quarters for dairy cattle on the fair grounds, and exhibitors will this year find the best quarters they have ever had at the California State Fair.

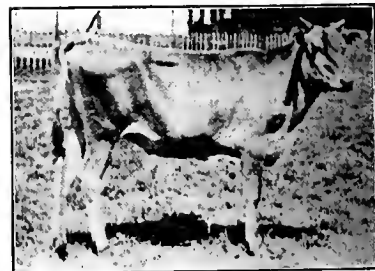
There are a number of important building improvements under way at

the present time, and these will be completed before this year's Fair opens. The space in front of the new section of the grand stand has been filled in level with the space in front of the old stand, and will be seeded immediately. At the south end of the old stand a section of bleachers is being constructed, with a seating capacity of 2000. This section will be covered with a canvas roof and seats will be free. To build this section it was necessary to move the entrance to the race track to a point which is more convenient than the old, to the racing quarters.

There is another new feature at the fair grounds which will be welcomed by thousands of visitors who recall the somewhat limited restaurant service of past Fairs. The entire space under the new grand stand which was occupied by the automobile exhibits last year has been converted into a restaurant with a seating capacity of several hundred. The entire side of the building has been covered with flyproof screens and over the screens are shutters which can be raised to do service as shade awnings. The kitchen is roomy and light, and a first-class service is promised.

To relieve the stuffiness and heat in the main building, great ventilators have been built in the roof. This was a much-needed improvement, and will be appreciated by visitors.

Altogether it is quite evident that the past year has marked a very great improvement in the management of the State Agricultural Society. The field of the society is a vast one, and it is almost too much to hope that some faults cannot still be found, but we feel abundantly justified in saying that exhibitors and visitors at the California State Fair this year will find better arrangements for convenience and amusement than have characterized any previous State Fair.



One of Gerald O. Hillier's Good Young Jerseys.

BUTTER SCORING AND MILKING CONTESTS AT STATE FAIR.

The butter scoring and milking contests at the California State Fair will be conducted by representatives of the State Farm. It is planned to place the tests in charge of a Government expert.

THIN-FLESHED DAIRY ANIMALS

Observations show that the most economical milk cow is one which is naturally spare and thin-fleshed. The more blocky type takes more feed to produce a pound of butter-fat.

CHECKING COW'S PERFORMANCE

Every dairyman should get a pair of scales that can be conveniently hung near the cows and weigh every milking and mark it down. It only takes a few minutes and gives an exact record of what the cow is doing every day.

The one great secret of producing pure milk and keeping it pure is to exclude bacteria that come in the form of dirt and dust. Cleanliness at every point must be observed.



THE HORSE



Hoof Cracks--Causes and Treatment

(By Student Robert Cilker, During 1911-12 Session.)

Read before the Medical Association of the San Francisco Veterinary College.

Sand Cracks.

Sand cracks are classified according to their location. They are called toe cracks when occurring in the middle line of the horn of the toe, and a quarter crack when occurring in the horn of the quarters. There are also sand cracks of the sole and of the frog met with, but are not plentiful, and rarely serious enough to cause much trouble.

The toe crack is met with more often in the hind foot than in the fore, while the quarter crack is met with more often in the fore feet, and is here usually confined to the inner side. The portion of the wall known as inside and outside of the toe is seldom affected. A crack is called complete when it extends from the coronary margin of the wall to its wearing edge, and is incomplete when it is not so extensive. A simple crack is one that occurs in the horn only and does not implicate the sensitive structures beneath. A complicated crack is one that is deep enough to allow of laceration and subsequent inflammation of the sensitive membrane; such complications may vary from a simple inflammation set up by laceration, and irritation of the sensitive structures, by particles of dirt and grit that have gained entrance through the crack to other and more serious changes in the shape of the formation of pus, hemorrhage from the blood vessels, caries of the coffin bone or there may be a tumor-like growth of the horn on the inner surface of the wall.

Causes of Quarter Crack.

One of the causes of quarter crack is the faulty conformation of the animal, and I will take up this cause first. In the animal, with turned out toes, more than a fair proportion of the animal's weight is thrown upon the horn of the inner quarter; here there are three causes exerting their influence together. The horn is brittle, the wall of the inner quarter is thinner than that of the outer, additional weight is

placed upon it and fracture is the result. Another cause for quarter crack is in the condition of the hoof known as contracted heels. With the contraction and its pressure upon the sensitive structures within the region of the quarters and frog has arisen a low type of inflammation and the horn has become dry and brittle in this region. The exciting cause in its fracture is found in a hard day's work upon hard, dry road, with perhaps a suddenly imposed improper distribution of weight, due may be to stepping upon a loose stone or a succession of such evil transfers of weight due to traveling upon a road that is very rough in its whole extent. Another cause for quarter crack is where the wall is very soft from poulticing or perhaps due to the animal feeding in a pasture that is very moist. When this animal is put to work upon a hard, dry street the sudden change from extreme moisture to extreme dryness, combined with hard work will cause the wall to deteriorate and may be the cause of a crack. Unskillful shoeing also plays a part in causing sand crack. Removal of the periople by excessive rasping is a pre-disposed cause. Cracks or their starting points may also be caused by using too wide a shoe. Poor shoeing does not cause cracks, though as much as many other things, for more depends on the state of the wall and conformation than upon the existing cause.

Toe Crack.

This crack is met with nearly always in a heavy animal, in the hind feet, and is directly attributable to starting a heavy load.

Cracks of the Sole and Frog.

Sand crack of the sole and frog is but seldom met with, and then it is in connection with some exceptionally deteriorated quality of the horn, or occurs as the result of a direct injury and from a badly pumiced foot.

Treatment.

In a simple case where the crack is superficial and close under the coronary margin of the wall a sharp cantharides blister to the coronet immediately above it will be very effective, as in this manner an increased secretion of the horn is brought about, and the crack prevented from becoming longer. No matter what treatment

you use a blister applied to the coronary margin is always beneficial. To get the best result from a blister it should be repeated several times, and at intervals of about two weeks. Another method known as clamping the crack is usually used where the crack is rather long. There are a good many different kinds of clamps, and so I will only endeavor to describe one. This clamp, called Koster's Sand Crack Clamp, is rather wide with five teeth on each side. A groove is burned on each side of the crack to accommodate the jaws of the instrument, and the clamp itself pressed home by means of a special pair of forceps. No clamps should be put on unless the wall is moderately strong, and the wall should be thick. All clamps are put on for the same purpose, to try and stop any movement of the wall in the region of the crack.

Other means employed are by paring out on both sides of the crack, starting about a half an inch on both sides of the crack and cutting it out to the bottom at an angle. Apply an antiseptic dressing and over this cotton, then wrap the whole foot with tape as tight as possible. The tape is used for two reasons—to dry and keep out as much dirt as possible and stop the movement of the wall in the region of the crack.

The following prescription is one of the most beneficial used in the treatment of cracked or brittle feet:

Yellow wax, olive oil, lard, Venice turpentine, honey—of each 8 ounces.

Melt lard, wax and honey (slow fire), then add the rest, and stir until cold. Apply once daily.

Surgery.

This method is only indicated when the crack is greatly complicated by the presence of pus, or by the growth of adventitious horn on the inner surface of the wall. When the crack does not extend the whole length of the wall, the best method is to cut out a triangular piece with the base uppermost, cutting as deep as the sensitive lamina. With the removal of the horn the diseased structures are exposed to view. All such should be removed by a free use of the scalpel and a suitable dressing afterward applied. If the crack runs the whole length of the hoof take out a piece on either side of the crack, the whole length of same. After treatment is

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for

Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Buncheas from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address The Lawrence-Williams Co., Cleveland, O.

MINNEWAWA STOCK FARM

Four

Registered Percherons

Stallion and three mares. Not akin. Colts from all shown. Price for the bunch, \$4,000.

M. E. Sherman,

Fresno, Cal.

Horses, Mules & Shetland Ponies

I both buy and sell mules and horses. Have on hand at all times mules to hire in carload lots. Also breed Shetland Ponies, and have several weanling colts and a few well broke ponies for sale.

J. L. MENDENHALL.
WILLIAMS, CAL.

Ky. Mammoth Jacks and Registered Saddle Horses

We have a grand lot of Kentucky Mammoth Jacks and Registered Saddle Horses. The very best of individuals, and royally bred ones—good enough to show any place.

We are preparing the express on them for the next thirty days. Write us your wants.

CLOVERDALE FARM, LEXINGTON, KY.



J. L. MCCARTHY

LIVE STOCK AND REAL ESTATE AUCTIONEER
Fifteen years experience at Chicago, St. Louis and Kansas City Stock Yards. Country sales a specialty. Address

Key Route Hotel
Oakland, Cal.



John Blair Says There Are Two Horses Hitched to the Wagon. Can Anybody See More Than One?

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

exactly the same as the one just referred to.

Shoeing.

A partial rest is given to the affected parts by easing the bearing of the shoe at the point required. This may be done either by removal of part of the wall at the spot indicated, or by thinning the web of the shoe in the same position. Never have a clip directly under the crack or where the weight would fall. If it is a toe crack the usual clip should be dispensed with, and a clip on each side made to take its place. At the same time care should be taken to avoid throwing the weight far forward. In case of a quarter crack, where the constant movement of the part under the expansion and contraction of the foot makes itself most felt, it is wise to apply a shoe with clips fitting moderately tight against the inside of the bars. By this means movement will, to a large extent, be stopped.

H. B. Thornberry, who brought a car of splendid jacks to California last year, has been for several months in the jack breeding sections of Missouri and the Middle West selecting a bunch of the best stock he can find. These will be brought to California about the 1st of September and sold. The Journal recently received a letter from Mr. Thornberry in which he states that he is gathering together a bunch of jacks and jennets made up of better individuals than he thought it possible to secure, and that he will bring back with him the best lot ever brought to the Pacific Coast. As the lot brought out by Mr. Thornberry last year proved to be even better than the claims he made for them, we shall look for a choice lot from his description of those he is now getting together. Mr. Thornberry also writes: "They are going to have the best crop of oats in northern Missouri that I believe I ever saw, going fifty bushels and up per acre almost all over, which is great for this country. I was over in Illinois and through Indiana. Crops look very bad in Indiana, and they do not look at all good in Illinois, especially the corn crop. Missouri corn looks fine, is higher than a man on horseback in some places, but is beginning to need rain very badly in certain parts. In some sections it is already beginning to curl. Kansas wheat crop is great, estimates running from 80,000,000 to 85,000,000 bushels, against 65,000,000 bushels last year."

STATE FAIR PROGRAMS.

The State Agricultural Society will this year issue the State Fair program direct from the office of the society. It will be the best yet issued, completely itemized and with detailed information to exhibitors showing exact time and place for each particular class on exhibition.

THAT WORK HORSE CLASS.

Our contention that there is no class provided for work horses in the State Fair premium list, in which class grade draft mares can be shown, has proved to be without foundation of fact. We, like a number of our readers, were misled by the heading of class 5 on page 31 of the premium list. We are in receipt of a letter from E. W. Howard, who was in charge of the revision of the horse section of the premium list, in which he states that this class 5 is the class intended for work horses. We call attention of our readers who have grade mares and geldings to exhibit, to this class, as the impression has been gained by many that there is no class in which their stock can be entered.

The Live Stock and Dairy Journal—In your article, "Changes in the State Fair Premium List," you express the opinion that the class for grade draft horses must have been omitted through error. As Chairman of the Live Stock Committee I beg leave to state that this action has been under consideration for several years by the Live Stock Committee, and was done for several good reasons.

First—This class in the past did not bring out the exhibit that it was designed for, and which it would naturally be expected it would. Contrary to the expectations of the committee the farmers did not enter their stock, the only entries have been of inferior stock, and apparently for the purpose of collecting a little easy money, it has, therefore, entailed the disagreeable duty upon the judge and director in charge of enforcing the rule covering the situation, namely Rule 2, page 21.

Secondly—In the opinion of the committee the proper class for exhibitors to exhibit their grade stock is in the class provided for work horses, as it is an absurdity to attempt to judge the relative merit of exhibits which conform to no accepted type. Unfortunately entries in this class have been just plain horses, and in most instances not only unsound, but of doubtful ages and in no condition to be shown.

Each judge in turn has stated to the committee that it was impossible to arrive at a standard from which to judge the value of these entries as breeding stock, for the reason that they represent no type and approach in no way any of the standards for horses of the draft breeds. Further, there was no justification in retaining this class when viewed from the standpoint of the greatest good to the horse breeding industry. To award blue ribbons or premiums of any kind to such stock and then have them go out and be represented as winners at our State Fair certainly could not raise the standard of horse breeding.

A comparison of the exhibits of grade draft horses at the State Fair and those made at the various county fairs would indicate that a grade classification properly belongs to the district fair, for I have observed that these grade classes have been well filled at the district fairs. It would also indicate that the farmer seems to be of the opinion, although possibly he has not expressed it, that grade stock is out of place at the State Fair.

As far as encouraging them to grade up their stock, such exhibits as have been offered heretofore would be no encouragement to them. It would appear that this is a case where theory and practice do not coincide. Based on the above stated results the committee omitted this class on the general principle of using the small amount of premium money at their disposal where it would bring out creditable exhibits beneficial to the industry represented. Very truly yours,
EDWARD W. HOWARD.
San Francisco, Cal.

ENFORCING STALLION LAW.

The Stallion Registration Board is engaged in vigorously enforcing the law governing the registration of stallions in California, and occasional arrests are being made in various portions of the State. In Placer County five separate complaints were recently sworn to in one day by a representative of the Board against parties who had failed to register their stallions.

When the roads are bad, make your load lighter, and when going up or down hill let your horse take his time. Going fast with heavy harness and a load is sure to injure a horse.

POINTS OF A HORSE'S HEAD

The head of the horse affords a practical illustration of character, breediness and stamina. A pretty head—that is, a neat, trim, proportionate head—is essential to the beauty of a horse. A large, ungainly head detracts from the appearance of the otherwise perfect animal, and tells its story of under-breeding or cross-breeding. A small head, if not in proportion, is an indication of lack of vigor. In fact, a large head is better than an unduly small one. In draft horses large heads in proportion to scale, with broad foreheads and prominent, clear, fearless eyes wide apart, are desirable. The Roman nose, common among Clydesdales, is not liked among the light breeds, for while among the former it is taken to denote a wilful but enduring disposition, among the latter it is regarded as a sign of lack of breeding. Courage and intelligence are denoted by the clear, fearless eye, but the small sunken optic is invariably the accompaniment of a vicious, unreliable disposition. In conformation the lips should be strong and neatly carried, the nostrils large, dilating and fine, and the ears nicely pointed, not too far apart, and fairly erect, but if anything slightly carried forward. The front view of the perfect head should show the greatest thickness at the jaws, with the head tapering toward the middle, while the profile should show full between the eyes, and straight from the eyes to the nose. Undue thickness at the juncture of the head to the neck is a blemish, as a coarse setting results in an awkward carriage.

Never whip or be cruel to a balky horse. Balkiness is a kind of disease. If your horse stands still and you are in a hurry, try undoing and doing up again a part of his harness. Lift up one of his feet and put it down again, or try coaxing him along with an apple or something else that he likes.

Great care should be used in watering the horses. A little and often is the best way.



Jack Rogers 4576

Won First Prize at State Fair in 1911 in saddle class, 2 years and under 3, and also won second in combination ring among aged horses. He fills the eye of lovers of good horses. I stand him at the low sum of \$20.

Also Col. Rogers (3287) at the same price.

Their colts will sell at sight to any one wanting a fine saddle colt.

J. T. RAGSDALE

Breeder and Trainer of Five-Gaited Saddle Horses.

MERCED, CALIFORNIA.

Jacks and Jenneys

About September 1st I will be at the Fair Grounds, Stockton, Cal., with two carloads of Jacks and two carloads of Jenneys. This will be unquestionably the best importation of Jacks and Jenneys ever brought to the State.

Write me your wants now, and I will have an individual to suit you.

H. B. THORNBERRY,
Box 679, Stockton, Cal.

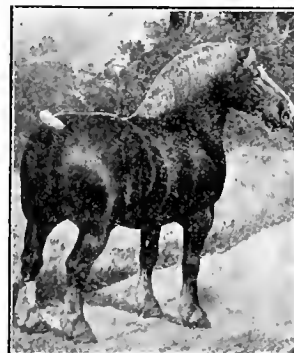


Lafayette Stock Farm

J. CROUCH & SONS., Props., - - LAFAYETTE, INDIANA.

Grand Summary of Prizes Won in 1911

Grand Special Prize Offered by the Societe Hippique Percheronne de France—For best group of five Imported Animals, either sex, any age, at International, Chicago, 1911, Bronze Statue, value 2500 francs, won by five of our imported 3-year-old stallions.



- 73 First Prize Ribbons.
- 56 Second Prize Ribbons.
- 28 Third Prize Ribbons.
- 18 Fourth Prize Ribbons.
- 16 Fifth Prize Ribbons.
- 2 Sixth Prize Ribbons.
- 2 Reserve Champion Ribbons.
- 23 Champion Ribbons.

A new importation of good, big-boned, heavy horses, including Percherons, Belgians and Shires, can be seen at our permanent stables at the State Fair Grounds, Sacramento, Cal.

J. F. CAMPBELL, Mgr.,
Phone Park 31. Sacramento, Cal.

INCREASED DEMAND FOR DRAFT HORSES.

"Many firms in cities are forced to use motor trucks simply because they can't get good, heavy, sound draft horses. The expense of running these auto trucks is considerable, and many of these companies are ready to exchange them for draft horses just as fast as they can get desirable ones."

This is the statement of Dr. C. W. McCampbell, assistant in animal husbandry at the Kansas State Agricultural College. Dr. McCampbell, as Secretary of the Kansas Horse Breeders' Association, is in a position to know about the horse market. He has kept well posted on the "Gasoline vs. Horses" question in the cities, principally Chicago. He makes these statements after investigating the conditions carefully.

High-class draft horses are selling for \$225 to \$500 each. The majority sell for \$300 each. This condition of the market has existed during all of the past year, Dr. McCampbell says.

But the demand is for good, heavy draft horses—that is, horses weighing 1700 pounds or over, that are sound, smooth and good movers. Less than 5 per cent of all the horses received in Chicago during the past year were of this type.

This great demand for big horses, according to Dr. McCampbell, has caused many local buyers to ship common, inferior horses to market. Apparently they think that prospective purchasers, not being able to get the horses they desire, will pay good prices for common, inferior stuff. But the men who are looking for draft horses simply refuse to bid on ordinary stock, and many local buyers have lost money on animals that they have shipped to the larger markets.

The result of this is that the leading markets are flooded with common, inferior horses which are hard to sell at any price. This leads many persons to believe that the entire horse market is dull; that there is no particular demand for any kind of horses, and that horses are cheap. This, however, is an entirely erroneous idea. There is no particular demand for the average farm horse, but the demand for big, sound draft horses cannot be supplied.

Farmers also are looking for heavy draft horses, Dr. McCampbell says. This is the day of heavy machinery, and in looking about for the most economic and satisfactory motive power the farmers are beginning to realize that the heavy draft horses is the cheapest motive power to be found for the average farm.

THE HORSE AND ITS COST.

Carefully conducted investigations by the Agricultural Department of the University of Minnesota, as well as those conducted by the office of farm management of the United States Department of Agriculture, show that under ordinary conditions on American farms work horses are utilized only about three and a half hours a day on the average. Horse power is thus utilized to less than half its capacity. Per unit of work done this power costs more than twice what it should cost. The full utilization of the power actually available would thus reduce materially the cost of producing crops. The cost of keeping a work horse is on the average about \$125 a year. The average utilization of the horse is about 1250 hours a year, at an hourly cost of 10 cents per hour. If we double the number of hours' work the horse does—and this can be done without injury to the animal—we reduce the hourly cost to 5 cents.—W. J. Spillman, agriculturist in charge of Farm Management and Plant Industry, United States Department of Agriculture, Washington, D. C.

SANTA CLARA COUNTY FAIR.

In San Jose, September 5th to 15th, will be held one of the most elaborate county fairs yet undertaken in California.

Especially to stockmen and breeders is the fact that over \$3000 are offered in cash prizes in the live stock department, as well as many special prizes.

There will be a milking contest, with first prize of \$25 and second prize of \$15 for the persons drawing the most milk in ten minutes at five different trials from any cow they may select.

In the poultry department there will be over \$1000 in cash distributed among amateur poultry breeders alone. There will be an egg-laying contest, the first prize for which will be \$25 and the second \$15.

During four days of the fair there will be a great harness horse meet. The purses aggregate almost \$9000, and over 100 horses will be there, coming from some of the best stables in the United States.

There will be automobile races, motorcycle races, aeroplanes, balloons and numerous other attractions.

SADDLE HORSES AT CALIFORNIA STATE FAIR.

The saddle horse show to be given at the California State Fair in September promises to be more extensive than anything ever attempted before in this line. In addition to the regular purses offered in the premium list \$500 in special prizes will attract saddle horse enthusiasts here from all over California. The society will endeavor to encourage saddle horse breeding in the State.

Such events as hurdle jumping, in-and-out riding with an egg on a spoon and many other difficult features will be included in the saddle horse show. It will be an entertainment in which the general public will get as much enjoyment as the genuine horse enthusiasts.

Lord Denmark, the celebrated saddle stallion which swept all of the Kentucky blue grass fairs, will be brought here by R. H. Whitten of Los Angeles. Other entries will be by Judge E. A. Bridgeford of San Francisco, Mrs. E. W. Scripps of Miramar, Mrs. E. P. Riggle of Piru, W. Bernstein of Hanford, Professor W. L. Anderson of Los Banos and James Gethin of San Francisco.

MULES NATURALLY TIMID.

Mules are timid creatures, possessing a great amount of curiosity in their make-up. They are affectionate, but have a habit unusual in domestic animals, that of resenting an injury and on account of this many become ugly and stubborn.

A study of their disposition and a good line of treatment from the beginning will overcome these evil habits. It is much easier to take a mule colt and train it than it is to take an older mule that has been misused and overcome any bad habits or tricks rising from years of abuse and poor management.

BROOD MARES FOR THE WORK.

Every farmer should keep as many good brood mares as will be of economy in farm work. New teams will be needed in farm work, and more horses and mules will be called for by the cities. Now is the time to get ready, as horses and mules for the next few years will command high prices.

AUCTION SALE

OF

125 Head of Draft Horses, Mares and Colts; 2 Shire Stallions; 1 Mammoth Jack; Hogs, Implements, Automobiles, etc., on the

BUENA VISTA RANCH

six miles south of SALINAS, California, two miles south of Spreckels Sugar Factory.

MONDAY, SEPTEMBER 2nd

9 A. M. SHARP

On account of lease expiring I am retiring from the ranching business, and will sell, on above date, all my live stock and implements to the highest bidder without reserve, consisting in part of 40 fine brood and work mares, weight 1300 to 1700 pounds each, sound and young; 15 head draft geldings and drivers, weight from 1000 to 1500 pounds each; several matched spans; 20 head fine 2-year-old draft colts; 15 head fine 1-year-old horse and mule colts; 30 head of fine suckling colts, weaned and halter-broke by day of sale; 1 Standard bred registered mare, "Winta Rose," Vol. 18, 5 years old, sired by "Eugeneer," with colt at side sired by "The Bondsman," No. 37641; 2 imported Shires; 2-ton stallions, 4 years old, registered, fine individuals; 1 imported Mammoth Jack, 4 years old; 60 head brood sows and shoats.

Implements and Tools

50 sets chain harness, 6 farm wagons, plows, cultivators, harrows, seeders, headers, mowers, rakes, in fact, all implements and tools for 1200 acre ranch.

1 20-horsepower Maxwell automobile, fully equipped and in good running order; also household goods, etc.

Terms, \$100 and under cash. Over \$100, six months' time with note and approved security at 8% interest. Stallions and Jack will be sold on six, twelve and eighteen months' time.

Old Fashioned Free Spanish Barbecue

At noon, conducted by F. W. Schroeder, the celebrated caterer from Salinas.

This is the largest and best lot of live stock in this section of California, and horsemen and dealers should not fail to attend the one Big Sale of the Year.

J. P. STRUVE,
Owner.

RHOADES & RHOADES,
of Los Angeles, Auctioneers.

DRAIN TILE BULKHEADS.

Concrete Retaining Walls Protect Tile Outlets.

In developing the low lands for farm purposes—and such lands are now the most valuable—immense sums of money have been spent in tile drainage. Too frequently a valuable tile drain is ruined by leaving the mouth of the tile unprotected. In such case the end tiles wash out; cattle tramp in the ditch; small animals build their nests up the tile; the outlet fills up and crops drown out. Such a great loss can be prevented by a small outlay of time and money in building a concrete bulkhead or retaining wall to protect the tile outlet.

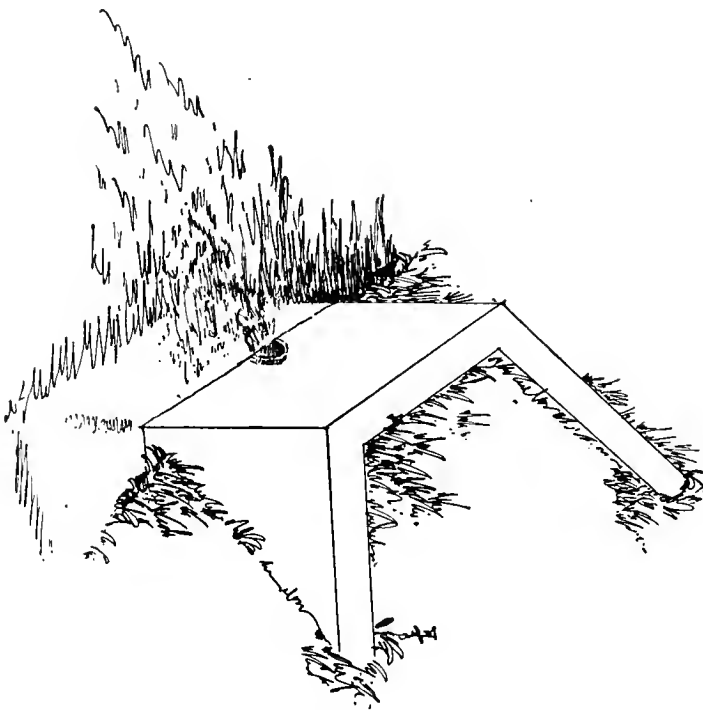
The straight retaining wall, shown in Figure 1, is a type which is often built where the open ditch begins at the end of the string of tile. However, most tile drains empty through the earthen side bank of the stream. Under these conditions a better design is a retaining wall consisting of a head and wingwalls as shown in Figure 2.

For building retaining walls, choose a dry time of year when there is little or no water in the open branch. Consider, for instance, a tile emptying into a ditch six inches above stream bottom and three and one-half feet below the level of the ditch bank. Plan the bulkhead with a five-foot length of headwall and two wings three and one-half feet long. Slightly back in the bank dig the foundation trench twelve inches wide and extend it two feet below the bottom of the open ditch. Turn the trench for the wingwalls at such an angle that the ends of the finished wingwalls will project back into the ditch bank and will be at ground level.

Old lumber will do for the forms. One-inch siding on two by four-inch uprights is good. Space the uprights about two and one-half feet apart. Let the back walls of the forms stand vertical and incline the front walls towards the bank so that the concrete will decrease in thickness from twelve inches at the bottom to six inches at the top. At the proper height to meet the tile drain, set a first-class drain tile (at least one size larger than the regular string) in the forms so that its front end will be flush with the outside of the wall after the concrete is placed. Bore four one-inch holes in the front form around the tile and place in them well greased wooden pegs. After the concrete has become hard, these pegs are removed and, by means of cement mortar, bolts are fastened in these holes supporting a grating for keeping out muskrats, skunks and rabbits.

Mix the concrete one part Portland cement to two and one-half parts sand to five parts crushed rock or one part cement to five parts bank-run gravel. If the trench should contain a little water mix so much of the concrete dry as will be required to take up the water. Make the remainder mushy wet. For the front of the wall, work a wooden paddle or a straight spade back and forth between the concrete and the forms so as to force back the pebbles and to give a neat mortar finish. At intervals of one foot in height lay old iron rods in the concrete at the junction of the head and wingwalls. Smooth off the top of the wall with a wooden float and finish with a steel trowel. Remove the forms after one week and fill in earth behind the wall to its top. With bolts, attach an iron grating or a screen of woven wire fencing to keep small animals out of the tile.

For a bulkhead of the dimensions given above, there will be required 2½ cubic yards of crushed rock, 1½ cubic yards of sand and twelve bags of cement. Ten dollars, the cost of the materials, may prevent the drown-



Wing Walls Prevent Bulkhead From Being Washed Out.

ing out of several acres of growing crops and save the expense of digging up and relaying the tile drain.

SHORT COURSES FOR FARMERS AT THE UNIVERSITY FARM AT DAVIS.

Short courses in farming subjects, lasting from two to seven weeks and planned for mature and experienced persons actually engaged in the business of farming, will be held at the State Farm by the University of California for the period from September 23d to November 21st. This is part of the University's plan, evidenced also in the summer session and the University Extension Department, of making its educational opportunities available for all ages, and not merely for young men and women of the traditional college age.

This work at the University Farm will begin with a two weeks course in General Agriculture, from September 23d to October 5th. Irrigation will be the subject for the first week, with instruction in the laying out of systems, the preparation of land for irrigation and the construction of ditches and headgates. Soils, fertilizers, farm crops, etc., will be considered in the second week, and the 780 acres of rich land of the University Farm, its alfalfa

fields, its pumping and irrigating system and its varied crops—cereal, vegetable and fruit—will be used to illustrate the teaching.

Dairy farming is the second two weeks course at Davis, from October 7th to 19th. This may be taken independently or in succession to the course in General Agriculture. The first week will be devoted to teaching the proper sanitary methods for milk production and laboratory tests for milk, including the use of a Babcock milk tester in testing for butter-fat, etc., and the second week to the study of types, breeds and qualities of dairy cattle, using as material the fine herd of pedigreed Jerseys and Holsteins and the well equipped dairy barn and creamery.

Animal industry will be the subject from October 21st to November 2d, with a week devoted to beef cattle, sheep and swine, and a week to horses and mules. The farm has fine examples of Hereford and Shorthorn beef cattle, of Poland China, Berkshire, Duroc-Jersey and Tamworth hogs, of Shropshire, Hampshire and Southdown sheep and examples of various types of horses.

Horticulture and viticulture will be a separate course, from October 14th to November 2d. The first week will be devoted to citrus fruits, the second

to deciduous fruits, the third to viticulture. The farm has a raisin vineyard, an experimental vineyard with hundreds of varieties of wine, table and raisin grapes and a large orchard containing many varieties of fruit trees.

Dairy manufactures will be dealt with in a seven weeks course, from October 1st to November 21st. No creamery in California has a higher reputation for the excellence of its butter than that of the University Farm. It is splendidly equipped for making butter and cheese on a large practical scale, similar to that of a commercial creamery, and butter and cheese makers have unique opportunity in this course to perfect themselves in the best methods for achieving quality and high price for their product.

The wives and daughters and sisters of the men who come for the courses in animal industry and general agriculture will have a course all of their own in Home Economics. The particular subject will be sewing and dress-making. Many women will be enrolled, also, as well as many men, for the course in Poultry Husbandry, which will extend from September 23d to November 2d, with a shorter course of lectures and demonstrations from October 17th to 19th. Students will be taught approved methods of operating incubators and brooders, the planning and construction of poultry buildings, the dressing and marketing of fowls and the methods of preventing poultry diseases.

Detailed information in regard to these short courses may be obtained by writing to the University Farm, Davis, Yolo County. The short courses are not open to persons under 18 years of age.

HOMESEEKERS SHOULD VISIT STATE FAIR.

The California State Fair this year should have some of the finest exhibits ever entered in the agricultural line, judging from the reports now coming from many counties of the State. There are twenty-four counties already in, and these have taken up about all of the room available in the big pavilion. The State Agricultural Society will be at a loss to locate any more room.

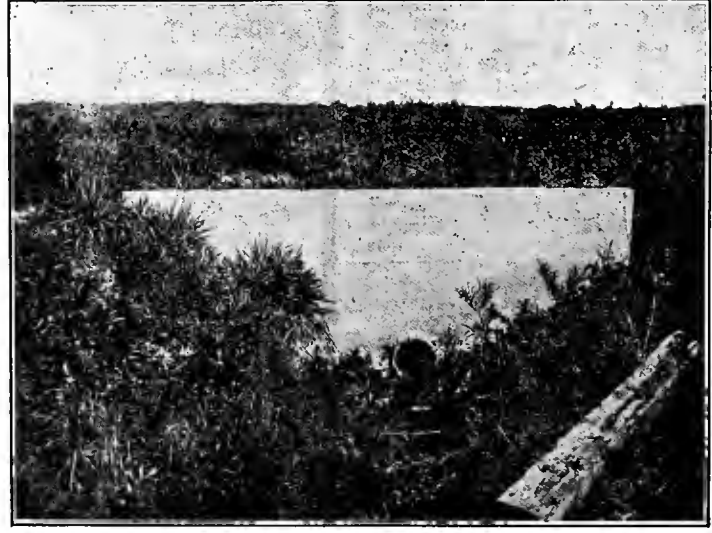
This has been a good year in many farming sections of the State, and from many counties come the report that special attention was given this year to raising special articles for the State Fair. Some of the valley counties are striving to outdo each other in the race for prizes which will be awarded to the best displays.

The agricultural and horticultural displays at the Fair each year are good examples of what the State can produce. The Sacramento and San Joaquin Valleys usually come in for the largest displays. A settler intending to locate in the State can get a good idea of the resources of California, and tell for himself just about what locality he would care to select for a home or investment.

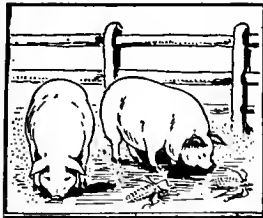
The State Fair is being looked upon by homeseekers as a medium through which to get acquainted with California without being obliged to travel about the State making expensive investigations. A visit to the State Fair in September at a small cost supplies as much information as a journey to the different farming communities.

Alfalfa does not attain maturity until the third or fourth year; therefore, do not sow it expecting to get the best results in less time.

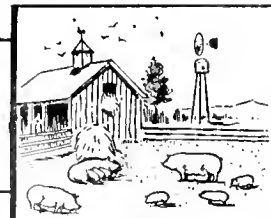
The drag system is rapidly forging to the front in good roads work.



A Straight Retaining Wall With Grating Inside Tile.



THE SWINE HERD



RAISING SWINE IN THE KLAMATH COUNTRY

The Livestock and Dairy Journal—We feed our swine mainly rolled frosted wheat for grain, with alfalfa, rye, barley and tulle for pasture, with an abundance of fresh, clean running water and plenty of marsh for wallowing. Stock beets also figure in the bill of fare, and skim milk. Skim milk is, to my mind, one of the best hog feeds, and the greatest opportunity of this Klamath country is a dairy. Sell the cream and feed the skim milk to the leather jackets. Eventually we will run the dairy Shorthorns here, but at present our number of cows is far less than I would like it to be.

In time we can turn off toppers at 7 months old, 160 to 190 pounds. At present it takes from eight to nine months to do it, but those that we have fed milk certainly do respond to it.

Our winter feed is fine alfalfa chop and rolled frosted wheat, stock beets and small potatoes steamed into a hot mash and fed hot in the morning and cold at night.

Our Berkshire sows are all rather noteworthy. Woodlawn Duchess 13th and Woodlawn Queen 11th, aged 2½ years, raised by Everson Brothers of Ohio, went through the show season of 1910 without being topped, and won the junior championship over all breeds at the Chicago International. Masterpiece Duchess 274th and Wisconsin Whiteface and our herd boar, Artful Starmaster 2d, all bred by H. C. Taylor of Wisconsin, were winners at the 1910 Wisconsin State Fair, and at all country fairs where shown. In addition to these we have three wonderful gilts that, although only shown locally, are better, I believe, than the sows we bought of Everson Brothers. These gilts were also bred by Everson Brothers and shipped to us as pigs. As yearlings they weigh over 300 pounds, and are in good farrowing shape—not too fat.

Our Poland Chinas come largely from Schoenfeld's Wisconsin herd. They are mainly sows by Stylish King 6th, Foxy Meddler, Tecumseh Sunshine, Black Style 3d and Giant Hero. Our herd boars are some of Giant Hero and Meddler's wonder. We have thirty A1 brood sows, a weeding down from fifty bred gilts shipped here from the East.

As regards the desirability of the two breeds, I prefer the Berkshires. We have far more Poland Chinas and sell a greater number, and they are the more popular breed, but the Berkshires, as far as I have observed, do better on the same amount of feed, grow faster, are more gentle, are much better mothers, have larger litters, and nobody can deny that for a meat hog the Berkshire is the best. From a fancier's standpoint they appear to me to be a "typier" and "classier" hog. Of course, with their great length they are the direct opposite of the blocky Poland Chinas.

F. R. STARR.

Greenfields Farm, Oregon.

OAK GROVE BERKSHIRES.

The Live Stock and Dairy Journal—We have recently made some changes in our herd of Berkshires that now gives us one of the best foundation herds in the State, not alone in blood

lines represented (and we have almost all the prominent ones), but also in individuals.

We never expect to lay claim to the largest herd in the State, but we do expect to have one of the most select. First, last and all the time our motto is "Quality."

Knowing that some of your readers might be interested, the following are some of the individuals that call Oak Grove Dairy Farm home.

At the head of our herd we have placed Holt's Longfellow (146361) and Berry's Combination (156340). Holt's Longfellow is by Double Premier, by Premier Longfellow, and is a hog having and exceptionally good back with good hams and good length.

Berry's Combination is by Robhood, by Imported Baron Compton, one of the best boars ever imported from England. He is the largest boned hog for his age that we have ever seen. Incidentally he is some breeder, for he was bred to thirty-five gilts last fall, and his average litter so far is better than eight.

Among the sows might be mentioned Berry's Eclipse (151956), whose sire sold for \$1000 a short time ago. She is a great-grand pig of Masterpiece, and in her pedigree we find Black Robinhood, Ideal Masterpiece and Berryton Duke, Jr.

Ravenwood Duchess 139th (159530) is an exceedingly fancy sow. She was sired by The Rival, by Lee's Artful Premier 12th, by Premier Longfellow, he being the great-grand sire on both sides. She is now suckling a litter of pigs by Holt's Longfellow that we are conceited enough to say is one of the best litters in the State. Her sow pigs have been sold at a very fancy figure.

Silver Tips 177th (160139) is another one that we expect great things from. She was sired by Optimo, by Imp. Baron Compton and is out of Silver Tips 175th, by Robinhood Premier, by Berryton Duke, Jr.

We have others equally as good, but time and space forbids any more tooting of our own horn, which we hope you will overlook this time and lay it up against the enthusiasm of a younger breeder who believes in "Berkshires on every farm."

Fate permitting, we expect to be at the Fair with a small herd, where they can speak for themselves. We do not expect to put them in extreme show condition, as we do not believe in it, but more in breeding condition, for that is what we are—breeders.

OAK GROVE DAIRY FARM.

By H. G. Armstrong.
Yolo County, Cal.

IDEAL CONDITIONS FOR BERKSHIRES.

The Livestock and Dairy Journal—I appreciate The Live Stock and Dairy Journal. This paper is doing much on the Pacific Coast to create a desire for purebred animals.

We do not feel competent to write anything regarding the raising of Berkshires, but we have been very much interested in what has been printed in your paper regarding the care and feeding of hogs. These articles by scientific breeders are very helpful. We try to use good judgment in applying these ideas and methods to our local needs. Cleanliness seems to be a very essential element in this business. The conditions are ideal for Berkshires here at the eastern foot of the Sierras. Climatic conditions are very favorable. Our aim is to procure the best breeding possible, and to make the price reasonable. By sending out fine animals at reasonable prices we have no trouble in selling all the good ones we can raise, and we believe there is sale in the West for thousands of Berkshires if they are properly advertised.

Yours for more purebred animals in the West.
H. F. ALPS.
Reno, Nevada.

Greenfield Farm of Klamath Falls, Ore., breeders of Poland China and Berkshire swine, one of the new advertisers in this issue, informs us that they will follow the fair circuit this year, and will show at Portland, Salem, Sacramento and possibly Eugene.

Swine breeders will find in this issue an advertisement of interest—that of Edward A. Hall of Watsonville, Cal., breeder of Poland China swine. Mr. Hall is a member of the American Poland China Record Association, and is deeply interested in promoting the breeding of registered swine in this State.

If you want to know the dollar-and-cents difference between pure-bred and scrub hogs, try shaping up one of each kind and selling them.

Hogs in the fattening pen should be supplied with large quantities of clean, pure water. It is required to properly digest and assimilate dry feed.

It is just as necessary for little pigs to have fresh dirt to root in as to have nourishing feed.



Champion Herd of Mulefoots. Owned by John H. Dunlap, Williamsport, Ohio.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

300

Purebred
Berkshires
Duroc - Jerseys
Tamworths
at

Swineland

We are offering high-class Boars, ready for service, and Spring Pigs of both sexes, for immediate shipment.

All stock sold on a money-back guarantee.

Swineland

Box 161. YUBA CITY, CAL.

RED DUROC HOGS

Best Bred Stock Now in California

YOUNG STOCK AND SERVICE BOARS AND SOWS FOR SALE

All registered pure-breeds, and from such sires as Wonder and Klondike. New Importations from Missouri and Indiana. We are located in the Imperial Valley, and are here to supply California, Oregon and Arizona breeders. Write for prices and pedigrees to

MOORE BROS.,

Box 202, El Centro, Imperial Co., Cal.



Recorded Mule Footed Hogs are very prolific as well as less susceptible to Swine Diseases. Their great vitality, large litters and quick growth make them the coming hog. JOHN H. DUNLAP, Box 499, Williamsport, Ohio.

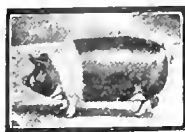
Roselawn Stock Farm

WOODLAND, CAL.

BREEDER OF SHORTHORN CATTLE,
POLAND CHINA HOGS,
SHROPSHIRE SHEEP

T. B. GIBSON

Proprietor



FOUR OAKS STOCK COMPANY

Woodland, California

BREEDERS OF BERKSHIRE, HAMPSHIRE AND
POLAND CHINA HOGS.

Their breeding is as good as it is possible to obtain. Since selling our herd boar, Double Premier (88215) to Mr. A. B. Humphrey of Mayhews, Cal., and Kennet (106045) to Mrs. C. E. Byrns of Woodland, we have put at the head of our herd Ravenwood Longfellow 10th (136430), assisted by Holt's Longfellow, a son of Double Premier (88215). We also have a Double Black Robinhood boar to breed our twenty head of Double Premier gilts to for spring farrow. A few of our mature sows are Ravenwood Duchess 92d (140527), Trixie M. (120796), Star 3d (120795), Royal Lady 10th (121407), Berrys' Eclipse (151956) whose sire sold for \$1000 this fall; Belle Wilts 14th (113497), Lady Premier 3d (106046) and Woodland Lady Premier (144095)—the best one we ever raised; sired by Kennet (106045).

Correspondence promptly answered. Our prices are reasonable for quality of stock.



DUROC JERSEYS AT MODESTO

BOARS, SOWS AND YOUNG STOCK FOR SALE.

Registered Duroc Jerseys. No better anywhere. Write for prices. Have stock for immediate delivery. Address:

JOHN P. DAGGS

BOX 5 R. F. D. 5 (One Mile North of Town), MODESTO, CAL.

BERKSHIRES

A grand lot of richly bred pigs of both sexes for sale. Express prepaid. Also a lot of good service boars offered cheap.

A few tried and proven brood sows and bred gilts priced to sell. Satisfaction guaranteed. Write us your needs.

WEAVER STOCK FARM, BRAWLEY, CAL.

REGISTERED

POLAND CHINA SWINE

PRIZE WINNERS

Finest Stock in the State from \$30 up

M. BASSETT, Breeder

HANFORD, CAL.

SUNNY SIDE STOCK FARM BERKSHIRES

Young Stock from Blue Ribbon Winners For Sale

G. A. MURPHY

PERKINS, CAL.

Quality Berkshires

Oak Grove Berkshires are the large, growthy, vigorous, money-making type. They carry the blood of Masterpiece, Black Robinhood, Silver Tips, Premier Longfellow and Empress, names that mean quality wherever Berkshires are bred.

We are able to quote you the best Berkshires at the cheapest prices.

Further information cheerfully given.

Oak Grove Dairy Farm, Woodland, Cal.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

Forcing Growth in Pigs

Professor Dietrich of the Illinois Experiment Station, in a recent bulletin, gives his system of producing hogs that weight 290 pounds when they are 8 months old. He says:

Since some feeds are especially deficient in mineral matter, and since pigs very often do not have as wide a range as previously, it becomes especially important to feed mineral matter. As practiced at the Illinois Experiment Station, salt, charcoal, air-slaked lime or ground limestone, bone-meal or rock phosphate and hardwood ashes are put into separate compartments of the same troughs and set into the pen with the pigs. By this means they have free access to it and can eat as much of any one or of all of them as their metabolism requires. This apparently supplies them with the necessary mineral ingredients, so that they get along and produce good results:

Must Have Protein.—In regard to the protein, it has been early shown that the animal can not grow without this material, and pigs that were fed on a diet low in protein, as, for instance, corn and water, attained a live weight of only eighty pounds at 8 months of age. Of course, such a ration is also deficient in mineral matter and variety. It has further been shown that when pigs have been fed with an excessive amount of protein, they become stunted and will not grow well thereafter. This being true, it shows that this part of the ration must be carefully guarded.

In order to get proper results the pig that is being grown and fattened for market should have between six-tenths and seven-tenths of a pound of digestible crude protein daily per 100 pounds of live weight, and this should be fed during the growing period. During the fattening period a much smaller quantity, or about half of this amount, is sufficient. The reduction should be made gradually and extend during a period of four weeks.

Feed of Breeding Hogs.—Pigs that are being developed for breeding purposes should have somewhat less protein than those that are being grown and fattened for market. Furthermore, as the breeding pig grows older, it should have the amount of protein fed gradually reduced at successive stages.

It was shown that during the fall and spring, when the temperature is about right, the pigs will drink approximately the right amount of water, when having free access to it. It has been shown that during the winter season, when the water is cold, they will not drink enough water for the best results. This being true, it becomes necessary to feed water.

Water an Important Factor.

Young pigs and breeding stock need more water than fattened hogs. Starting with pigs at 2 months of age, they should have twelve to thirteen pounds of live weight. In the case of pigs that are being grown and fattened for market this is gradually reduced to four or five pounds at 8 months of age, when the pigs are in prime condition for market. In the case of pigs that are being developed for breeding purposes the amount should be reduced to about eight to nine pounds. A breeding herd, as far as this matter has been gone into, seems to require about eight to ten pounds of water daily per 100 pounds.

Fat, Feeds, Water and Roughage.

The amount of carbohydrates in a ration necessary for breeding pigs can perhaps best be controlled by the condition of the hogs. They should not be fed so much that they get too fat. A fattened hog, furthermore, should never be put on full feed, but should always be fed so

that everything is eaten before the pig leaves the trough or feeding floor. In the case of young pigs, less than this amount should be fed. That is, they should be kept decidedly hungry except when the ration contains so much roughage or water that their appetites are satisfied on that account.

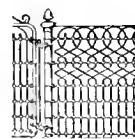
To put it on the same basis as protein, pigs that are being grown and fattened for market should have 2.2 to 2.4 pounds of digestible carbohydrates daily per 100 pounds of live weight at 2 months of age. This might be increased up to 6 months of age to about 2.6 or 2.8 pounds. Pigs developed for breeding purposes should have a little less.

Must Have Exercise.

In regard to exercise, it has been clearly shown that this is an important consideration. All pigs need exercise, and the young and growing pigs especially need to have this point carefully looked after. While a pig that has been properly horn will do well for some months, or during a growing and fattening period, as, for instance, a hog being finished for market, with little or no exercise, it does not necessarily mean that a pig that is being fed for breeding purposes will not be injured by this practice. It is quite evident that, if good breeding animals are to be developed, they need plenty of exercise, as well as due consideration in the other points that have already been mentioned.

Good Breeding Essential.

The last point to be considered is the influence exerted on the offspring by the ancestors. While this has not yet been very thoroughly developed, it seems to be indicated quite clearly that, under an improper environment and under the influence of an improper system of feeding, a breeding herd of swine will gradually and quite rapidly run down, so that in a few generations the breeding herd



Anchor Yard Fencing

Cheaper than Wood. Artistic Designs. Last Forever. Send for Catalogue.

California Anchor Fence Co.

STOCKTON,

CALIFORNIA

Knob Hill Stock Farm

REGISTERED POLAND CHINA SWINE

Stock of Various Ages, Both Sexes
For Sale

A. M. Henry, Proprietor

Farmington, Cal.

HILLMONT FARM

High-Class Registered

BERKSHIRE HOGS

Write for Information or Come
and See.

CHAS. GOODMAN,

Williams, Cal.

S. B. WRIGHT

SANTA ROSA, CAL.

**BERKSHIRE HOGS, DORSET SHEEP
TROTTER HORSES**

Breeder of Sonoma Girl 2:05½
Charley Belden 2:08½, etc.

Farm 2 miles west of Santa Rosa on the
Electric Railroad. Fare, 5 cts.

will be greatly impaired from the standpoint of profitable pork production. This being true, it is evident that it is possible to improve the herd gradually, so that greater and more economical production of pork is possible.

BREEDERS SHOULD CO-OPERATE AT THE FAIRS.

The Live Stock and Dairy Journal—I find that the breeders of swine do not work in harmony at the fairs. They openly criticize each other's herds, which they should not do. It is well enough for them to get together and talk over the relative merits of the various individuals and herds, but they should not criticize a fellow-breeder's herd to a gentleman that is buying.

Don't go around and brag about how many prizes you are going to win, for you may be disappointed. Keep it to yourself until after the ribbons are awarded.

I saw a case last year of a gentleman who criticized a boar that was as good as a breeder can raise. I would like to have had him, as he was a beauty. This gentleman said that he had a boar home that beat him in a hundred different ways. It

pounds which is mixed carefully and fed in a slop.

The brood sows are fed a ration about like the following: 23 pounds corn meal, 23 pounds ground oats, 24 pounds bran, 23 pounds middlings, 6 pounds oil meal and 1 pound of salt. This is also fed in a slop.

In feeding alfalfa, the hay is cut fine and mixed with grain as follows: 15 pounds alfalfa, 30 pounds ground oats, 30 pounds middlings, 15 pounds corn meal, 9 pounds oil meal and 1 pound salt. This makes 100 pounds of the mixture.

The following ration is designated as a ration for growing swine: 30 pounds corn meal, 30 pounds ground oats, 30 pounds middlings, 9 pounds oil meal and 1 pound salt. When the hogs are to be fattened corn is added to this mixture.

STATE FAIR SUGGESTIONS.

Exhibitors that intend to show stock should notify the Secretary at once so that accommodations will be sufficient. The shortage of swine and sheep pens last fall caused a great deal of inconvenience to exhibitors. There will be a larger exhibit this year than last, but the Secretary will



GOLIATH (5001).
Mulefoot Boar. Owned by John H Dunlap, Williamsport, Ohio.

happened that the gentleman was looking for some young sows, so I followed him up. He stopped by a pen of sows and I stood near him. He started to tell what he knew about hogs. The sow he liked was lying down. He said: "Look, fellows! Ain't she a beauty. Look at her head. Look how fat she is." He bought her without making her get up to look her over. After he had left the pen I made her get up. She was stove up in the front legs and her hind feet were bad. I was glad that I had not said anything about arranging to breed my sows to his world-beater at home. This same man criticized the reserve champion sow just before he bought the other sow.

JOSEPH LEVY.

F. D. Starr, manager of Greenfields Farm, Oregon, brought a carload of hogs to the Sacramento market recently. The stock was of mixed weights. It found ready sale. This farm is being developed to an annual output of 1000 stock hogs, besides having a purebred herd of top-notch Berkshires.

RATIONS THAT MAKE STRONG, THRIFTY PIGS

The following rations have been found to give excellent results at the University of Wisconsin:

For little pigs: 35 pounds oats ground fine, 35 pounds middlings, 20 pounds corn meal, 9 pounds oil meal, and 1 pound of salt. This makes 100

not know what preparations to make until entrees are in unless each exhibitor makes his wants known early.

There are several changes in the premium list. Look it over early and get your entries in. Don't forget about the silver cup for the young herd of Berkshires, given by the American Berkshire Association.

A Berkshire breeder, N. H. Gentry, will pass on the swine. Get your Berkshires in the ring and find out if you have the winning kind.

G. A. MURPHY.

The American Yorkshire Club has recently issued its annual announcement, which is offered for free distribution. Those of our readers desiring a copy may obtain the same by addressing the Secretary, Harry G. Krum, White Bear Lake, Minn.

SHEEP WORTHY OF GOOD CARE

The common opinion that sheep should be kept as scavengers and that they will thrive best on the farm that is too poor for other kinds of live stock is twin brother to the opinion that white beans thrive best on a poor, thin soil.

Sheep do not drink much water, but what little they drink must be absolutely clean.

The fleece of the ram should be dense, even in quality, and of a strong, clear white fiber throughout.

25---Bred Berkshire Sows---25 FOR SALE

We offer twenty-five high-class bred Gilts and Sows for Sale. Bred to farrow late in July, August and September.

They are large in size and of good quality. They are daughters and grand-daughters of Premier Longfellow, Masterpiece, Baron Duke 50th, Rivals Champion, Mayhews Premier and other good boars, and they are in service to a son of Premier Longfellow, two sons of Masterpiece and a good son of Berryton Duke, Jr.

We also have some young Boars and late Spring Pigs for sale. Prices on bred sows, from \$35 to \$60.

Come and get your pick, or write for description and prices.

GRAPE WILD FARM

A. B. HUMPHREY, Proprietor.

MAYHEWS, CAL.

Farm Located Eight Miles East of Sacramento on Folsom Road.

J. FRANK SMITH & SONS

Breeders of

REGISTERED DUROC JERSEY SWINE.

Young stock for sale, out of dams of choice breeding and sired by two great boars, Billie Rosebud, Jr., No. 89729, and Nebraska Sensation, No. 108661. These boars carry the blood of great winners and producing hogs.

All stock guaranteed to be as represented. Address:

H. H. SMITH, Mgr.,

Route No. 1, Box 42.

Hanford, Cal.

Dutch Belted Cattle

Hampshire Swine

In Dutch Belted Cattle I have the winning herd of America, having won all the important prizes at the National Dairy Show for the last five years. Young stock for sale.

My Hampshire Hogs have been selected with great care and my herd is one of the oldest in America. Herd headed by El Salvador, winner of two silver cups in the strongest competition of the middle west. Fifty young sows and boars for sale. This breed has won over all others in the dressed carcass contest for several years at the International Fat Stock Show.

If interested in the best Irrigated Valley in the U. S. write for circular.

FRANK REED SANDERS

Salt River Valley, Mesa, Arizona

I HAVE 150 DUROC JERSEY HOGS

All eligible to registration, that I wish to sell for \$1500. Have no feed and no time to give them my attention. A number of sows are with pig.

C. L. De Ryder,

Pleasanton, Cal.

Ten Fine Young Poland China Boars For Sale

Six months and over. Vigorous stock by my imported boar and out of my best sows. Price \$25. Registration certificates with each animal.

VALLEY VIEW FARM

Watsonville, California

Edward A. Hall, Proprietor

GREENFIELD'S FARM

Breeders of

Registered Poland China and Berkshire Swine

Write us for our prices and of spring farrows now ready for shipment, and for the records of our high quality brood sows.

FOR SALE—The herd boar ARTFUL STARMASER 2d, No. 139,834. Out of Premier Alexis 2d, (104,723) by Starmaster (97071). Farrowed April 2, 1909. Weight in service condition (not fat) 650 lbs. There is no better boar on the Coast.

Correspondence a pleasure. Address

KLAMATH FALLS, ORE.

F. R. Starr, Manager

The American Hog a Great Profit Producer

Feeding and Management of Hogs

"I am always ready to say a good word for the great American hog. He has without doubt done more for the American farmer than any one kind of live stock produced on the farms of this country," said A. J. Lovejoy, a well-known Eastern breeder, in a recent address. "He feeds the peasants of Europe, the cotton pickers of the south, the workmen in the mines, the workers in the shops, the laborers of the world, as well as the masses, and the millionaire in his palace. What is there more tempting than the various delicacies furnished by this self-same hog? Talk about your roast of beef, your saddle of mutton, but what are they in comparison to the tender, toothsome ham, the delicious prime bacon or even the good old-fashioned homemade sausage, tenderloin or rib roast, the mild little pig spared by foresight for something nobler than juvenile roasting, and prepared by art and man's device to a perfection surpassing nature? There is no delicacy on the market that compares with this produce of the pig—bacon. Why, the course of empire westward was greased with the bacon fried on the way.

"One of the reasons why the hog is a great source of profit is in a great measure owing to its remarkable prolificness, reproducing at an early age and bearing from five to ten and often more pigs at one birth. A statistician who handles figures with great ability once estimated that a single sow producing only six pigs at a time in ten generations would amount to the grand total of 6,500,000. Probably this gentleman made no estimate for losses of pigs before weaning time, nor did he figure on any losses from cholera or other diseases. However, his figures would give one the impression that he got up the statistics of the poultry business in advertising the American hen. It takes a great statistician to get ahead of a hen crank.

"At the present day the American hog not only supplies the various products of his carcass in the eatable line to the wants of the people of the civilized world, but also furnishes lubricating oils, brushes, combs, buttons, knife handles and other ornaments of various kinds; and even the blood, a portion of the bone and waste scraps of other meat not otherwise used are manufactured by the great packing houses into by-products to be used as feed, among which is blood meal, bone meal and a preparation known as tankage, which latter is considered one of the best protein feeds yet discovered and is very valuable to combine with corn meal or other fat-forming feeds for use in the production of pork, coming as near, when proper amounts are used, to making a balanced ration as can be found. When tankage is used in connection with corn or corn meal for the finishing up of hogs it should be used in the proportion of about 80 per cent corn or meal to 20 per cent tankage. When used with mixed feeds of various kinds, such as wheat middlings, ground corn and oats, or barley and middlings, about 12 per cent tankage is sufficient. If skimmed milk is used to mix these feeds, 5 to 10 per cent of tankage would be sufficient.

"There are some farmers who do not like the work of handling and breeding swine, nor the feeding and care it requires to make it a success. Such people should let this business alone, for to succeed in the handling of any kind of farm stock one must like the animals and the work that is required in their care. One often hears the remark, 'As dirty as a pig.' This is certainly a villification of the animal which Benjamin Franklin's colored servant said was 'the only gentleman in England,' from the fact that he

was the only animal that did not have to work in that country. Now, as a matter of fact, the hog is not naturally a dirty animal. In most respects he is more cleanly than any of our domestic animals, and unless closely confined in small quarters he will always keep himself and his bed clean. In this respect he is far more tidy than the horse or cow. Of course, he, being an animal that cannot perspire, suffers more from the heat, and if he can find nothing cleaner in which he can cool his body he will wallow in a mud-hole. Many up-to-date farmers at the present time build a bathing pool in which fresh water can be run daily or continually if one has a spring on the farm. These are built from 10 feet wide to about 20 feet long and at a depth of 10 to 12 inches, of cement with an outlet, and in this manner the hogs can have a cool bath without any mud. This is a splendid thing to have on the farm, and by pouring a little disinfectant and a little crude oil every few days into this bathing pool, a hog breeder or feeder will never be molested with lousy hogs. It also keeps the skin in a healthy condition and is really a benefit to the hogs.

"I once heard a gentleman say that a hog is a machine, one that oils itself, puts ten bushels of feed into less space than a bushel measure and in doing so doubles the value of the feed used, then carries it to market on his back. Corn, barley, oats, grass, clover, alfalfa, rape or any of the by-products of these loaned to a well bred hog is money at big interest—in fact, it has been called a mint; the grains and grasses are the hullion which, put into the hog, is transmuted into pork; and it is an honest mint and gives sixteen ounces of avoirdupois of edible meat. Properly bred, intelligently fed and handled, this autocratic porker will pay off our debts, furnish the money to improve the farm, remodel the old home, furnish it up to date, as well as furnish the means to send the farm boys to the agricultural colleges of the country, thus making them better prepared to farm and better and broader men in every respect than they would otherwise be.

"The breeding of swine with me has been made a specialty for over thirty-four years, and it has been, in fact, as well, a pleasure and a profit. Of course, this business has not all been a bed of roses by any means. Like all other kinds of business it has its dark days as well as bright ones. For the last few years the prices on live hogs have been extremely high, yet, on the other hand, the grains that have had to be used in making this high-priced product have also been extremely high; that the profits have been a little more during the last five years than they were during the period of 5-cent pork and 30-cent corn."

The proportion of sows in the hog runs on the Eastern markets is being commented upon, and it is looked upon as very short sighted policy. The well-posted feeders say that if they will market them, at least they should be put on feed for a thirty-day period instead of bringing them in when in thin condition.

Keep all the hogs on the place busy. Let them all be growing, fattening or producing young. You can't stay still in the hog business. Every animal is either losing money or making it for you. See that every individual hog is on the right side of the ledger, and that you have a definite object in keeping it.

It is a good sign that the purebred sheep are increasing rapidly and are, therefore, improving all of the flocks.

(By Carl Christopher, Arkansas Experiment Station.)

Hogs require attention regardless of conditions, age or sex, but the brood sows require particular attention, and to the breeder's skill in feeding and managing his brood sows, provided they have been properly selected, will be due in a large measure his success.

Pasture and forage crops should be provided for the pregnant sows, because of the cheapness of this method of feeding and the desirability of keeping the sows in good form by exercise, fresh air and sunshine. Along with the pasture and forage crops some grain should be fed especially as pregnancy advances, for best results, since the pasture and forage crops provide only about a maintenance ration. The forage crops that are especially suited to pregnant brood sows are the clovers, alfalfa, peas, beans, vetches, etc. The ordinary pasture grasses also provide a suitable pasture for brood sows.

Whether the sow should be in medium or high condition at the time of farrowing is a matter of personal choice with the breeder. However, most breeders prefer to have their sows in pretty good condition at this time. The sow should without doubt be in good condition at this time—neither too fat nor too lean. Perhaps having the sow too fat at this time is the lesser of the two evils. The sow should receive a nutritious ration at all times, but care should be taken not to feed a too concentrated ration close to farrowing time, as the sow is likely to become constipated. This is a disorder that should be carefully avoided during pregnancy, and especially at the time of farrowing. To overcome this disorder the greater part of the grain ration should be given in the form of a slop all during pregnancy, and toward the close of the gestation period some laxative feed, such as bran, oil meal, roots or a small amount of flax seed meal should be introduced into the ration. It should be remembered that the digestive tract of the hog is small, and that a very bulky ration cannot be used to the best advantage.

It is well to remember that the main demands upon the brood sow are those for building up new tissue, and that the kind of feed is important. To build up new tissue the sow must have protein in her ration. This may be supplied by feeding any one of a number of nitrogenous feeds. The young sow requires more of this kind of feed in her ration than the old one because she is still growing when her first litter is born. A variety in the feeds is necessary to good results with swine. With brood sows it is particularly true that several feeds combined give better results than any single one.

For a few days previous to farrowing, the feed should be limited in quantity and of a sloppy nature, and as has been previously stated, the tendency to become constipated at this time must be overcome. A box of charcoal, salt and ashes should be kept where the sow can get it at all times, summer or winter. These materials tend to satisfy the hog's craving for the mineral matter and act as a vermifuge and preventive of disease. If the brood sows are given free access to the above mixture and are fed a varied ration which contains a sufficient amount of protein, the breeder will not be likely to be troubled with the sows eating their pigs at farrowing time.

The quantity of feed for several days after farrowing should be small. The sow should not be offered any feed of any kind until she gets up of her own accord after farrowing, and

for the first day or two a thin slop will be sufficient to quench her thirst and provide all the nutrition required. Within a week or ten days after farrowing the sow should be getting a good ration of nutritious milk-producing food.

If skim milk can be had at this time and fed with a ration of equal parts corn meal and shorts, good results should be fed heavily, for the grain after farrowing the sow should be getting a full ration and during the whole remaining period during which the sow is giving suck to her pigs she should be fed heavily, for the grain thus produced in the suckling pigs indirectly are made at a low cost for the feed consumed. Generally a sow with a large litter will lose in weight and condition, and when given the best care and feed. The conditions should receive the greatest of attention at all times.

In general it may be said that the ration for the brood sow should be liberal in quantity and rather high in protein, should on the whole, be rather succulent in nature and not too concentrated and should be made up from a variety of feed. Correctives, such as charcoal, salt and ashes should always be provided.

The age at which young sows or gilts should be bred depends upon the system of breeding the breeder intends to follow. If the young sows have been well cared for and have made good growth they may be bred at 8 months of age. They may be left in the same lot with the market hogs up to the time in the fattening stage where the protein in the ration has been reduced to a minimum. At this time the young gilt should be removed from the fattening pen and continued on a good growing ration. If the young sow is bred at 8 months of age she will drop her first litter when she is 1 year old. After weaning her first litter, if properly fed, she will have another period of growth and should be bred to have her next litter when she has reached maturity at 2 years of age.

Another practice that is followed by some breeders is to continue to develop the young sow up until the time she is about 14 months old, and then breed her to farrow the first litter at 1½ years of age; by this time she will have reached maturity, and may be bred again immediately after weaning her first litter.

Good breeding sows should be kept in the herd as long as they remain breeders, which may be until they are 6 or 8 years old. Keep the sow as long as she can produce and take care of a good litter of pigs. She is less trouble, and will return a greater profit to her owner than the young gilt.

Sows should be bred to drop two litters of pigs each year—one in early spring the other in September or October.

About a week before farrowing time the sow should be separated from the rest of the hogs and put in a pen by herself. At this time it is desirable to accustom the sow to be handled. She should be handled gently at all times, and never allowed to become cross if gentle treatment can prevent it. It is extremely desirable that she remain gentle as long as she remains a brood sow.

At farrowing time the sow will seldom need any attention. In cold weather it may be necessary to dry the pigs as fast as they come and keep them covered up and warm for a short time after birth, but as a rule the sow will get along very nicely by herself, and should not be disturbed. She should not be provided with abundant bedding at this time, as the pigs are

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liable to become tangled in it and he unable to reach the mother's udder.

The pigs should be allowed to run with the sow from six to eight weeks (better eight than six). At weaning time the sow should be shut up with her pigs on the day that the pigs are to be weaned, and not given any feed on the morning of that day. The pigs should be allowed to drain the udder thoroughly and then the sow should be removed to a dry lot or pasture where there is little grass, and the pigs kept away from her the first few days. On the first day the sow should have free access to water, but not feed, and only a little feed on the second day. By this method the sow is speedily dried up. After which she should be put on full feed and put in good condition for breeding again. Within a short time after weaning the pigs the sow will come in heat and if she is a mature sow may be immediately bred again.

PACKERS ARE COMPLAINING OF BRUISED HOGS.

Beating and Prodding the Hogs as They Are Loaded in the Cars Render Them Unfit for Slaughter.

The packers throughout the country are complaining of bruised hogs being brought in, and they are inclined to think this is due to beating and prodding them to get them to go into the cars. Of course, some of the bruising may be done in transit, but it is more than likely that the harm is done as the start for the trip to the yards is made. There is a fine for rough handling in the yards, but that can't extend beyond the stock yards limits. Just a slight blow from a club will render a whole loin unfit for use, from bruises, and the whip will leave a blood spot. Packers declare that hogs show the bruising quicker than any other meat animal.—Portland Live Stock Reporter.

While the hog is a debt payer, it is necessary for the breeder, farmer or feeder to manage so as to make the greatest amount of money at the least cost in the quickest time, says the American Swineherd. To do this there is nothing of more importance than feeding alfalfa. The Illinois Farmers' Institute states that alfalfa is the most important single product of the soil, a product that has been neglected to the detriment of every community. Alfalfa as a forage plant for general use has no equal. It is easily grown, it is hardy under trying circumstances, and while it is an excellent food for all kinds of stock, and especially the hog, it at the same time through a natural process improves the soil by drawing from the atmosphere nitrogen. Alfalfa is a gold mine which can be worked most successfully by the use of swine feeding.

FEEDING MILK.

A great many dairymen have had effects from feeding milk to hogs.

The general opinion is that best results are obtained by letting it sour, and nearly all dairymen feed it that way. I have fed it warm from the separator without bad results. I have also fed buttermilk and had as good pigs as I ever raised.

I think the most unsatisfactory results come from feeding too much milk and nothing in the shape of grain with it. Skim milk is mostly water, and they have to consume more than they can hold to get sufficient nutriment.

One should be particular about the cows the milk comes from, as hogs can readily contract tuberculosis from cattle through the milk.

Milk, alfalfa and a little grain make good hogs cheap.

G. A. MURPHY.

BUCKING THE TIGER.

The tiger will roam at large at the State Fair on the closing day, Saturday, September 21st, when the '49 Day celebration will introduce the games of chance played by the old-timers. There will be roulette wheels, crap tables and probably a few other gambling devices. Just because it is the State Fair, however, the State law will not be infringed upon by the embryo gamblers, for all of the playing will be done with stage money that cannot be exchanged for the real coin of the realm.

The old gambling outfit will be just one of the features of the early day mining camp which will be established on the fair grounds during the revival of early day scenes. The Amusement Committee is figuring on making the event as realistic as possible, and to this end one of the gamblers will be caught cheating, so just to show how justice was meted out in the Days of '49 a mock lynching bee will be held and the "crooked gambler" will be taken out and "strung up." The bar-room will be made the scene of a shooting scrape or two.

An old-time bar-room will be established in the big horse show tent where the '49 Day headquarters will

be established. The miners will exchange gold dust for drinks, which, like the gambling prizes, will be only imitation. Everything will be done to make the day as much in keeping with the spirit of the times as possible.

In order for the public to take part in the square dances, play the gambling tables and dance the old-fashioned square dances, it will be necessary for them to dress in the clothes of our grandfathers and grandmothers, because those who come attired in modern clothes will be obliged to sit on the benches and stay there.

The dance and camp scenes will be held in the evening, while the pony express, prairie schooners and stage coaches dashing about the grounds will be made the afternoon show. Sham battles with Indians and high-waymen will be fought in front of the grand stand.

The award of prizes for the Forty-Niners will be as follows: Best stage coach or prairie schooner, \$100; Indians, \$100; pony express, \$50; most original miner's costume and pack outfit, \$75, \$50 and \$25; for old-time fiddlers, \$75; most uniquely costumed couple in old-time square dances most faithfully portraying the styles of '49, \$50, \$25 and \$15.

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13	9:10a	10:45a	11:05a
17	10:15a	11:45a	12:05p
23	12:15p	1:45p	2:03p
29	2:15p	3:45p	4:00p
35	4:15p	5:45p	6:05p
41	6:00p	7:42p	7:52p
47	10:10p	11:40p	12:01a

NORTHBOUND.

No.	Leave Stockton	Leave Lodi	Arrive Sac'to
6	6:45a	7:00a	8:30a
10	7:45a	8:00a	9:35a
16	10:00a	10:10a	11:45a
22	12:05p	12:15p	1:50p
28	1:45p	2:00p	3:35p
32	4:00p	4:10p	5:45p
40	5:45p	6:00p	7:35p
46	8:00p	8:15p	9:42p

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P. M.—12:10, 1:05, 2:00, 3:00, 4:05, 5:00, 6:00, 7:00, 9:10, 11:05.

*Daily except Sunday.

Trains Leave Lodi.

A. M.—6:05, 7:00, 8:00, 9:00, 10:10, 11:00.

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VETERINARY

We cordially invite the readers of *The Live Stock and Dairy Journal* to consult this department. Questions will be answered free by mail, and a stamp should be enclosed for return postage. Give age, color and sex of animals, with full details of symptoms and conditions and previous treatment, if any.

The Live Stock and Dairy Journal— I would be glad to know what to do for a Holstein cow giving bloody milk. The cow is about 5 years old, has been milking for about eight months and is with calf. The milk was first noticed to be a slight pink color about a week ago, and has gradually increased till today there was a little clotted blood in the milk. She is on good alfalfa pasture. I do not know if she was ever affected previous to this, as I got her in a trade for steer calves last spring. E. D. Glendale, Ariz.

Answer—The presence of blood in the milk of your cow is evidently due to some injury of the udder. By close examination of the udder you may be able to locate the bruise or injury. Rub the udder with antiphlogistine and throw away the milk for a time.

The Live Stock and Dairy Journal— I am a subscriber to the *Journal* and want to ask what to do for a sick cow. She acts as though she has lost her cud. She is bloated on the left side, and is constipated. We have done everything that we have heard of for her. The first medicine we gave her was a quart of castor oil. Then we gave her a pint of Epsom salts. Neither of these did any good, so we gave her an enema of salt and a couple of doses of whole flaxseed. The excretion from her bowels is very slimy, and she does not seem a bit better. Shall be obliged for an information you may give me. A. L. K. Hickman, Cal.

Answer—Procure from your druggist the following:
 Magnesia sulphate.....32 ounces
 Ammonia carb..... 2 ounces
 Gentian po..... 2 ounces
 Mix and give eight ounces in a pint of water every hour until entire amount is given.

"FREE-MARTIN" HEIFER.

What is a "free-martin" heifer?—M. C. W., Porterville, Cal.

The female twin to a male calf is called a "free-martin," and is generally incapable of breeding, although experiments have proven that a certain percentage of such heifers will breed, and it is best to try them before vealing them. Twin heifers are always capable of breeding, and twin bulls are always sexually perfect. The bull that is a twin to a heifer will breed normally also.

GERMS ON THE FARM.

"Teach your pupils at school to try to inculcate the doctrine at home that dirt means filth, and filth means abnormal kinds of germs," said Professor T. D. Beckwith, head of the bacteriological department at the Oregon Agricultural College, in an address before the teachers in the summer session classes.

"Germs which cause milk to sour, bacteria which dispose of filth and aid in making fertile soil, and microbes which cause disease were shown through a powerful microscope magnifying 1,400,000 times, and the professor explained their action on food and soil. The bacteria which cause the souring of milk were shown, 15,000 of which, placed in a line, make just an inch.

"Germs are alive. It is safe to say the ordinary human being voids thirty-

three million million germs a day, most of them by way of the feces," said Professor Beckwith. "Since a cow is so much larger, how much greater a number of germs it throws off each day.

"What do you think of the farmer who keeps his cow in a dark, muddy, wet stable dripping with manure, or in summer in the dry season allows her to accumulate an armor of manure? Every bit of that filth is full of germs which, if they get into the milk, produce abnormal changes, some of them breeding disease.

"The farmer sits down under such a cow without cleaning it and milks into a wide-mouthed pail into which, at every motion and every breath of air, there drop particles containing germs. Each germ makes two every twenty minutes; that is, they multiply to eight times their number every hour at ordinary temperature. You can see what it means to allow the milk to cool slowly instead of cooling it artificially at once.

"If children drink milk from untested cows which have bovin tuberculosis the germs do not pass out, but remain in the body, and by slow change, in twenty or twenty-five years, become human tuberculosis. All dairy animals should be tested so that we may know that there is no tuberculosis. You teachers can do a great deal by teaching your pupils the importance of these things."

IT IMPROVED THE BREED.

The following story was first published twenty years ago. It is pertinent yet:

President Scott of the Cincinnati Southern Railroad was greatly annoyed some years ago when he first took hold of the road by claims for damages for horses and cattle killed by trains on their way through Kentucky.

It seemed as though it were not possible for a train to run north or south through Kentucky without killing either a horse or cow. And every animal killed, however scrawny, scrubby or miserable it may have been before the accident, always figured in the claims subsequently presented as of the best blood in Kentucky.

"Well," said Scott finally one day when the 999th claim had just been presented, "I don't know anything that improves stock in Kentucky like crossing it with a locomotive."

GUARDING DIGESTIVE ORGANS

Watch the feeding of the calf, especially of the young heifer, so that no digestive disorders will occur. If the calf's digestive organs are not injured while it is young it has chances of becoming a good cow.

Well-bred heifer calves may often be purchased cheaply of people who live in town and keep but one cow for family use.

Each cow's udder should be thoroughly cleansed before milking and the hands of the milker should be absolutely clean and dry.

The good dairy cow has a capacity for a tremendous amount of feed, and this feed must be furnished her if she is going to yield the best returns.

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SHEEP



Many Reasons Why Farmers Should Keep More Sheep

There are many reasons why farmers should keep more sheep, writes Professor Thomas Shaw in *The Homestead*. The relatively small number that is kept on the average farm is one of the remarkable things about the live stock industry in the United States. The totals of this class of stock are not much more than they were fifty years ago. This is all the more remarkable in view of the tremendous expansion that has been going on in almost every line of agriculture.

Sheep should be kept on the average farm to aid in keeping down weed life. When weeds are young and sappy the sheep are in a sense insatiable devourers of the same. There are but few kinds of weeds that they will not trim down and consume and turn into good mutton if they have access to the same at a comparatively early stage in the growth of the weeds. When other pasture is not overabundant this cropping down of weeds will be more complete than under other conditions. They will even keep down at least in a considerable degree the growth of Canada thistles when thus managed. They are equally ravenous also for the seeds of weeds. When these have been formed and even when mature, and when weed seeds are so finely ground that they do not grow again when dropped upon the ground. I have watched sheep when first turned into a grain pasture to see what was their first choice. When such weeds as lambs quarter were present and quite young and succulent, they would take these first in preference to the grain.

They should be kept to consume the waste products. On every farm these abound more or less. They abound not only in the form of weeds, but in the form of grasses of various kinds. These are found numerously in the grain fields after the grain has been reaped. They are found in the high-ways, beside the farms, and they are found along fence borders whatsoever may be the build of these. The sheep that are given access to these will virtually clean up everything and in good form. The food thus eaten would otherwise be wasted, at least it would in large measure.

They should be kept to supply meat for the household. The farmer is much prone to confine his meat diet to salt pork, and largely for the reason that in this form meat is most easily kept. Where sheep are kept upon the farm the farmer may have fresh meat and of a delicious character by killing and dressing occasionally a mutton from his flock. With a good place to keep such meat, as an apartment in an ice house, he may enjoy such meat in warm weather. But even in the absence of such a place he may partake of such food during much of the year—that is, during all portions of the same when the weather is cool enough to enable him to keep such meat in a good condition. In this way much of the meat may be grown to meet the needs of the farm from products that would otherwise be wasted.

Sheep ought to be kept because of

the influence which they exert upon fertility. No class of animals kept upon the farm will equal them in the favorable influence thus exerted. This arises first, from the readily available condition in which the droppings reach the soil; second, from the scattered condition in which they reach the land, and third, from the general distribution of the droppings over all the land. In this way sheep leave land richer in available fertility when they graze upon it than it was when the grazing began. Thus it is that the proverb has arisen that the sheep has a golden hoof.

PREPARING WOOL FOR SALE.

Observations made by the Ohio Experiment Station in a number of scouring plants, worsted mills and wool warehouses show that there is need for improvement in the preparation of this important product for market. Ohio produces as good wool as does any country in the world, but on account of the poor way in which much of it is put up for market, it does not always compete as favorably as it should with some foreign wools.

The first essential in the proper preparation of wool for market is to keep it free from foreign matter. All manure and dirt locks should be removed from the fleece before shearing begins. Care should be exercised to keep the shearing floor swept clean and to remove all straw or dirt which may adhere to the fleece or feet before the sheep is brought to the shearing floor.

Attention should be given to the manner in which the fleece is removed from the sheep. The shears or clippers should be kept close to the body, thus avoiding "second cuts," which result in small particles of wool that are of very little value. The sheep should be so handled as to prevent tearing of the fleece. A torn fleece is hard to tie in an attractive way.

Nothing except light weight, smooth-surfaced twine should be used for tying. Heavy twine is unnecessary, and its use is an injustice to the buyer. In opening a fleece tied with a twine having loose fibers on the surface it is impossible to remove such twine from the fleece without some of the fibers adhering to the wool and causing a great amount of damage to the cloth made from the wool. Sisal

binder twine is notoriously bad in this respect, and some firms will not buy wool tied with sisal twine except at a heavy discount.

In tying the fleece the edges and all loose locks should be placed on the inside and the fleece carefully rolled so that nothing shows except the clean, white side of the wool. Not more than one wrap of the twine each way for an ordinary sized fleece is necessary; two wraps of each way may be needed for a very large fleece. This amount of string pulled up tightly and securely tied will prevent the fleece from falling apart in handling, and will permit it to present a more attractive appearance than if more string had been used. Most buyers prefer to have wool tied loosely on a table or floor rather than in a box or other device which compacts the fleece into a tight bundle.

After shearing, the wool should be stored in a dark, dry place, where the dust will not get to it, and where it cannot be reached by rats or other vermin.

GOOD MONEY IN SHEEP.

The Drovers' Journal of Omaha gives the following example of the results obtained by an Idaho farmer handling sheep:

T. G. Wilson, who has 180 acres ten miles from Twin Falls, Idaho, was here this morning with two cars of lambs and ewes. Last fall he bought 700 ewes at \$1.90 per head and sold the wool off of them at \$1083, then sold 400 lambs for \$1200 and today brought in two loads of ewes and lambs, receiving \$3.75 per hundred for the ewes and \$7.90 for the lambs. The balance of the ewes he sold on the place the day he started with the shipment here to a Salt Lake buyer at \$3 per head. Thus it figures out that what he paid, \$1400 for last fall he has sold for over \$6000 this summer. He had to feed them during the winter and early spring, but the feed was grown on his 180-acre farm, most all of which was in alfalfa. But all the feed did not go into these ewes and lambs, as he had 250 tons of hay to spare, which he put into 2600 yearlings, costing \$2.52 per head, that he fattened for market, buying an additional ten tons to finish out with. He sold the wool clipped from the yearlings at \$1.56 a fleece and the ewes out of the yearlings at \$2.52 per head. The remainder of the yearlings will be on this market the first of next week.

SOME ESSENTIALS IN SUCCESSFUL SHEEP BREEDING.

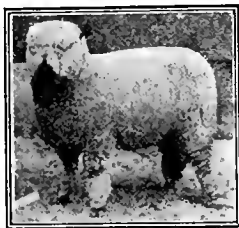
Choice of type and breed is the first problem that besets the beginner in sheep breeding, writes Professor Arkell of the New Hampshire Experiment Station in the *Shepherd's Journal*.

It is a common question with those who are entering the sheep business: What is the best breed? To that the only answer that ever can be given is that all breeds are good when adapted to the conditions under which they will be subjected in the region where the beginner's farm or ranch is located, and meet local market requirements. The selection of a breed depends largely upon the individual taste of the shepherd and the object he has in view in raising them. Breeds were formed simply through the agency of breeders in different communities having different ideals, environment also playing an important role. In America success can be attained with any of the popular breeds raised here, but no person should ever commence raising a breed that he does not fervently like and for which he knows as well he can obtain a ready sale. Perhaps his means and conditions do not warrant him to enter into the raising of purebreds. If he is raising breeding sheep merely for mutton purposes high-class grades will suffice, yet even in buying grades he should take care to select only those possessing a good mutton conformation. Many farmers think that, since they own simply grades, any old sheep at all will produce good enough results in the flock and the more cheaply they can buy the better. This is false economy, for very frequently they obtain in their flock sheep that do not pay for the expense of their keep.

Unity of type in the flock should be the direct aim of every breeder. This applies to grades as well as purebreds, that is, in the former case a type of sheep possessing mutton conformation and characteristics that are similar, should be selected. With purebreds this feature is especially important. In a flock of sheep where several types are exhibited, choice of a suitable ram is most difficult. Besides this, disparity detracts from the general appearance of the flock and gives the buyer or casual observer an unfavorable opinion. Every breeder should aspire to produce a distinctive type. He should endeavor to breed a class of sheep possessing characteristics that wherever they are will be recog-

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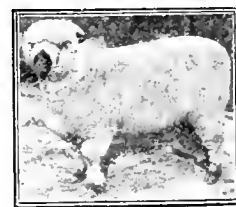
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nized as his breeding. But to attain this he should never uphold some fancy character in preference to utility features. No feature should be given undue importance beyond another, especially one that is purely ornamental. The establishment of an ultra form of some fashionable characteristic has at times become an obsession with many breeders, and this sin (for it cannot be called anything else) must be avoided. The ultimate destination of most purebred rams is at the head of grade flocks and there utility features only are taken into consideration.

The beginner should study well and become familiar with the type of breed he has selected. He must be able to recognize undesirable features and disqualifications. These he should endeavor to preclude from his flock, and to this end he should practice a rigorous culling each year. Individuals that do not possess the merits that his ideal calls for should be banished from the flock. Sheep having grave defects of character or type should not be used for breeding purposes. The absolutely perfect sheep, however, is still unknown, but every breeder should essay to approach as well as possible to what he considers perfection of type; therefore, he should practice judicious care in the initial selection of his foundation stock and in his subsequent breeding operations.

A SHEARING SCENE IN AUSTRALIA

In the Australian Pastoralist, published at Brisbane, Australia, we read an interesting account of the wool shearing operations as carried on in the great sheep districts of that country, as follows:

Though the Aramac station carries 100,000 sheep, its shed is used by other people who travel their sheep to it at shearing times. I happened to be there during the shearing season, and Mr. Nickolls drove us to the shed, some four miles from the house, over the gentle downs, startling browsing wallabies, who sat up and gazed at us. On the other hand, a flock of eight emus, who likewise gazed, and we felt most patriotic, having in this way the emu and kangaroo on either side.

Drovers lazily followed traveling sheep on the way to the shed, with the rarely yapping sheep dog shooting about—a stickler for tidy mobs. Hawks in thousands hovered round, and away in the distance, like a mirage, loomed the shed—not a tree near, only the enormous shed with the yards leading to it, and the shearers' quarters. A lonelier looking place would be hard to find; built entirely of corrugated iron, with a foreground of nothing but Mitchell grass, and a background of cloudless blue sky and hawks. Coming nearer the place sounded like a big prying monster, and still nearer the shouts of the men as they ushered the sheep from the yards through the race and into the pens in the shed.

Mr. McKenzie, the shed overseer, was busy at the counting pens taking tally of the silly newly shorn sheep, that left imaginary obstacles as they left the pens to join their disrobed brethren.

Mr. McKenzie joined us, and with Mr. Nickolls showed us the mechanism of the great shed from the beginning.

A flock of Rankkin sheep, exactly the same color as the dry grass tops, were coming in and entered the first yard. They poured through the gate like sand through an hour glass, while the hawks rested on the fence posts, and for half a mile on either side of the gate they capped each stump.

The dogs rounded the sheep and delivered them into the yard, and then flopped in the shade panting and

dribbling, while the men swung out of their saddles, and with the bridles over their arms squatted on one heel and rolled tobacco.

From the yard that the traveling sheep first enter, they pass off in batches to a smaller yard, and from there are driven up a crush by yelling men, shaking strings of tins to give them impetus, into the middle of the shed, where there are tiny pens from which the shearers take their sheep.

The "boards" line the sides of the shed, twenty men on either side and two men to a pen. The men are all numbered, and take the same stand each day, and work with great rapidity; the perspiration running from them and the machines whirling incessantly. The shears and wool presses are driven by a Marshall portable engine.

The men grab a muching sheep from the pen, lay it on its back, run the shears up the belly, clean up the head and legs, turn the animal over and grip its head between their knees, and with a few long sweeps the pretty, soft fleece rolls off its back. With a little reminder on the stern, the sheep proceeds through the shearers' legs to a little opening in the side of the shed and slides into the count pen outside. The whole thing is over in a minute or two. The ease and method of the whole performance is marvelous, but I believe the antics of a new shearer are only to be compared with those of an embryo roller skater.

The shearers and roustabouts wear moccasins made either of leather or canvas, partly to prevent slipping on the floors, made greasy from the wool, partly for comfort and also because the feet and legs take such a prominent part in holding the sheep.

The roustabouts gather up the fleeces directly they are free from the sheep, fold them and carry them to the sorting table at the end of the "board." They carry them in a ball, and on reaching the table seem to fling them haphazard into the air, but they always come down beautifully spread, with the head in the one direction.

Men appear to tear ruthlessly at the fleece, dropping the head wool in one pile, the skirting in another, while the back is re-rolled and placed on the sorters' table. The sorter, who looks something like a chauffeur in his long holland coat, sorts all the wool shorn by the shed. With the slightest touch of the staple between his finger and thumb, or a little puckered scrutiny he sentences the year's labor of a sheep to one of the class bins. It looks such an easy thing to be a classer!

From the bins the packers feed the great bale presses. The wool is piled into a tall, narrow box and trodden down, as it enters, by a man who sways and pitches on the springy mass. Below are two men bustling with a sack—a big sack certainly, but small in comparison with the surrounding objects. The great box of wool is moved over the sack, and a determined looking press descends. It calmly places itself on top of the box that the man has been tossing upon and just as calmly presses its way, and all the wool before it, into that little sack.

Deputy State Veterinarian Dr. Iverson recently concluded an investigation of two weeks on the cattle ranges in the mountains of Alpine, Amador and El Dorado Counties for the purpose of determining the cause of the death of many cattle in that section, due, supposedly, to eating poisonous weeds. Dr. Iverson found no weeds to which the deaths of the stock could be laid, and could discover no unusual conditions. He found numerous swampy meadows and flats, and reported a possibility of anthrax.

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A Prominent Eastern Breeder Finds Sacramento Valley an Ideal Place for Live Stock Husbandry

Sydney Jones, Jr., of the firm of S. B. Jones & Son, proprietors of the Sunnyside Stock Farm at Watertown, Wis., while en route with a shipment of four purebred Holstein-Friesian cattle from his home city to Wellington, New Zealand, spent several days in the Sacramento Valley investigating the many advantages of a location under the comprehensive canal system of the Sacramento Valley Irrigation Company for either a first-class stock farm or a large dairying proposition. Mr. Jones entered into a contract with the New Zealand government to furnish three heifers and a bull from his farm at Watertown to the Experiment Station of the New Zealand government at Wellington, New Zealand, for the sum of \$10,000. These four animals are as near perfect as scientific breeding can produce, and are to be the nucleus of a government Holstein-Friesian herd in that far eastern island.

The dam of the bull has a record of 29½ pounds of butter in seven days. Her dam has a record of 31.54 pounds of butter, or 134 pounds in 30 days' time. The sire of this beautiful animal is Forbes Tritomia Mutual De Kol, who is the sire of twenty A. R. O. daughters, as well as the world champion 4-year-old dairy cow, Jessie Forbes Bessie Homestead, holding the record of 34.95 pounds of butter and 142 pounds in 30 days. Her sire is also the sire of four 30-pound cows, which is the world's record.

S. B. Jones & Son also have the distinction of being the only breeders that have bred eight 30-pound cows, as well as being the breeders of the ex-champion cow with a record of 35.55 pounds. The three heifers forming a part of this shipment are yearlings, and are bred to a son of the world's champion, Canary Paul Forbes Homestead.

Sydney Jones, Jr., became interested in this section of the country through letters that he had received from his friend, N. E. Mulich, who came to the valley and is located on the Kuhn Project, with a herd of purebred Holstein-Friesian dairy cows. Mr. Jones stated that his first impression of the country was anything but satisfactory owing to statements made to him by a would-be hooster, who told him that it was absurd for any one to think that they could make a living in the Sacramento Valley on twenty or forty acres of land. Upon inquiry he found that his informant was not a land owner, and that he was a representative of the old regime that for many years past have been plowing and farming indifferently large acreages of the fertile lands of Glenn County without water.

Mr. Jones stated: "I have gone over the extensive project of the Kuhn people in the Sacramento Valley, and have been more than pleased with what I have seen. The canal construction is almost perfect in its detail. The one feature that impressed me very strongly in this matter is what the company is doing along the line of providing a drainage system in connection with their canal and lateral system. To the irrigated farmer I can readily see that a drainage system is an absolute necessity. Judging from what I saw with my own eyes I am convinced that the lands covering this project are highly productive and capable of great development. Coming from a section of the East as I do, where the areas are small, I was impressed particularly with the great, broad expanse of country extending for miles in every direction forming a great level plain and surrounded on the eastern and

western sides by high ranges of mountains. From the demonstrations that I saw in the different parts of the project I am satisfied that the future possibilities of the entire section, either in the line of dairying or fruit raising is particularly promising. Being interested as I am in the breeding of purebred dairy stock, my mind naturally reverted to that particular line. With the demonstrations of alfalfa that were shown me and that are manifest on all sides, combined with the short, mild winters and bountiful supply of water, convinced me that this is one of the finest countries that I have ever seen for this particular industry. The opportunity for making money here in either of these lines cannot be excelled in any part of the country that I have ever seen. Being used to the cold, long winters of the East, I, of course, cannot fully appreciate the fact that you in this favored section of California are particularly free from the difficulties that we have to contend with in Wisconsin. Under such conditions as I see here, the breeding of purebred stock can be made a wonderful success, and that at half the expense that breeders are obliged to meet in other portions of the country.

Where our farm of 340 acres is located at Watertown, Wis., we find that our cattle have to have from eight to twelve pounds of grain each day, in addition to the feed that we raise. On our farm we have from 75 to 100 head of registered stock, and produce all the hay that the stock consumes, in addition to about 300 bushels of barley and oats. We have twelve acres of alfalfa, but not such a stand as I saw on any of the tracts yesterday. We are milking thirty-two cows, and our returns from the sale of milk in a year from these cows is over \$3500. Our feed is very short about four months of the year, and we have to pay particular attention to a feed ration, being careful to make the proper combination that will produce the necessary results in the way of protein, etc. I can readily see that a man on 40 acres of land in the Sacramento Valley could certainly care for all of the cows that we are milking and realize a greater profit in the way of milk and butter-fat products than we are doing at the present time on nearly half a section in Wisconsin. I find here that a good stand of alfalfa will produce from eight to twelve tons of feed per acre.

"Another thing that surprised me very much was the fact that this valley raises as good a grade of Indian corn. The success of the individual settler who comes here and locates on this great project will be assured if he will begin at first and establish himself in the dairy business with a few good grade cows, and as his place becomes further developed he can make additions to his herd from time to time, gradually increasing the standard of his stock, until he has a first-class herd. It costs no more to keep a good cow than it does for a poor one, and the returns are proportionately greater."

When Mr. Jones was asked why he preferred the Holstein-Friesian stock he smiled and said:

"In the first place they are the best producers of milk known. That is, they produce the largest quantity. Then they are of such a frame and size that they demand a good price at any time for beef. It is true they consume more roughage, such as alfalfa, but at the same time they turn this into milk at a much less cost than any other breed of stock. Then they do not need the care and attention

that has to be given to many of the other breeds, and will become acclimated in a short time, no matter where they are taken.

"As I said before, this is one of the greatest alfalfa producing sections that I have ever seen, at the same time while on my trip I was shown many very fine orchards of prunes, figs, apricots, peaches, almonds and also quite a number of orange trees.

"While going over this immense project, fortunately for me, we met a committee which that day were visiting some thirty or forty different little farms located on the lands of the irrigation company, with a view to determining just which were entitled to the many valuable prizes that the company give each year to the settlers making the greatest improvements along certain lines.

"After leaving this committee I had the pleasure of visiting the little 25-acre farm of George N. Davis, located near Princeton, Cal., which was awarded the first prize of the Holstein cow. As the automobile stopped on a little prominence near the farm I had a good opportunity to get an idea of the arrangement and location of this little place. The home was rather a cheap affair, but surrounding it on all sides were flowers and blossoming shrubs which made it appear beautiful as it nestled among the 2-year-old peach trees which had assumed a height in that time of from 6 to 8 feet. The yard was laid out very artistically so that within another year these grounds will be a place of beauty. Just north of the barn was located about eight acres of as fine an alfalfa field as could be seen in the valley. I noticed on investigation that Mr. Davis had seeded his alfalfa with a drill. Even though it appeared to be very late in the season the ground was all covered with a green carpet.

"Just adjoining this alfalfa spot there was a good corn field of from three to four acres. The corn stood at a height of from 10 to 12 feet, and was laden with great large ears of Dent corn of good quality. This little place is located along the banks of the canal, the soil has been very thoroughly cultivated and everything has the appearance of thrift and industry. I was told that Mr. Davis had purchased this land some three years ago at a nominal price, and that as it stands at present it has a value of from \$300 to \$400 an acre.

"We then visited the little 7-acre tract that received the first prize last year. I did not have the pleasure of meeting the owner of this place, Mr. W. F. Burt, but as soon as we passed through the gate I saw that he must be a man of industry and intelligence, for his land was well cultivated, and while the acreage was almost entirely covered with fine fruit trees, still between the rows he was raising all kinds of small garden truck. There was not a particle on his place that was wasted, and every foot contributes to the wealth of its owner. Under the fruit trees back of the barn there were about thirty hives of bees. Of the entire acreage he has about three-fourths of an acre of alfalfa, and on it I saw several cows, six or seven hogs and a couple of sheep. The cow which he received last year as the first prize is a beautiful registered Holstein-Friesian animal. He also has a very fine Holstein-Friesian bull. I can heartily indorse the plan of the company in encouraging its settlers, for, as evidenced on Mr. Burt's place, he has here the nucleus of purebred stock which in a few years will insure to him his independence and prosperity. I was told that Mr. Burt sold over \$2600 in produce from his place in 1910, and I was fully convinced that this was possible on a place like I found there, and where

the fruit bears as abundantly as I saw it in all parts of the valley.

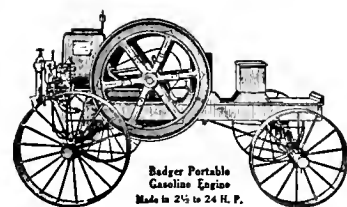
"The last day we were out on the lands we covered 85 miles in our automobile along some of the finest roads to be found in the West. I am satisfied in my own mind that the next two or three years will make wonderful changes in this valley of great possibilities. Where now there are long stretches of country showing the stubble fields of grain will be found the little homes such as I saw at Mr. Davis' and Mr. Burt's places."

WILL WEED OUT THE BOARDERS

The State Board of Control, State Veterinarian Dr. Charles Keane and Dr. Hatch of the Lunacy Commission recently discussed the advisability of placing a man with scientific knowledge in charge of the dairy herds at each state institution, in order to get the greatest possible return out of each herd. The star boarders, who are found not to be producing enough to pay for their feed and care, will be weeded out. It was recommended that a trial be made at one of the institutions by employing a State Farm graduate, and a young man named Anderson, a member of last year's graduating class, was engaged to take charge of the dairy herd at the Eldridge Home for Feeble Minded. He has already taken active control, and as a first step is building a silo. Careful records will be kept and results will be compared with those of the past. If it is found that returns justify it, steps will be taken to adopt similar methods at the other state institutions.

No department of governmental work is of greater importance to the agriculture of the country than the Bureau of Animal Industry. This has to do with the inspection of meat products, with keeping contagious cattle diseases out of the country, with assisting the states in the suppression of contagious diseases when several states are concerned, with preventing interstate commerce in diseased animals and in assisting the states in suppressing the Texas fever tick in sections where that is prevalent. Dr. A. D. Melvin, chief of the Bureau of Animal Industry, has consented to attend the meeting of the Farmers' National Congress in New Orleans, November 8th, and explain in detail the work which this bureau is doing for the benefit of the farmers of the country.

Weeds crowd the cultivated plants, depriving them of light and space in both soil and air.



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The Fundamentals of Good Roads

(By P. W. Rochester.)

We will never have a system of permanent highways worthy of the name until we have adopted a standard looking to absolute permanency.

In any class of construction work we must start with a proper foundation. It is all very well to try to study for cheapness, but we should not be willing to continue experiments that have proven their unfitness.

Who of us would think of using bitumen for the foundation of our house? What would you think of an engineer who would specify asphaltum for a bridge pier? How long would you retain an employe who would build an engine base of macadam? It is only a question of time before we on this coast will acquaint ourselves with the state of the art and adopt a standard of Portland cement concrete for the base or foundation, at least, of all roadways and pavements that are built for permanency.

Every citizen is interested in good roads. No state or country has ever reached a high state of cultivation or been blessed with worthy and refined citizenship that did not possess adequate means of transportation.

We are laboring with the problems of developing our interior, and of our young people concentrating in the cities. No one thing will do more to popularize and populate our rural vicinities than a network of highways by which social and commercial intercourse will be perfected. We must make our farm life inviting if we would have a motherhood worthy of raising an improving citizenship.

We have the modern means of transportation, but we can not operate our motors without adequate roads. Every taxpayer and every voter is vitally interested in the improvement of our roads. In the long run both road-making and maintaining becomes a general tax, and one that we must all assist in directly or indirectly paying. Not only do we all have to pay the tax for roads, but we all now pay the "mud" tax for not having a general system of well improved roads. Every railroad built into a country materially enhances the value of all realty, and every mile of good, permanent roadway adds more than its cost to contiguous property.

The modern development syndicate does not think of offering for sale a suburb subdivision until the streets are paved, and, if it should, it would not invite a class of constituents that would lead to the rapid development of the tract.

The demand for improved roadway conditions is taking a mighty hold on the entire country, and our best thought is being called for as to the type of construction that will prove itself economical. The economics of the question is in reality the vital phase. We will not build roads for sentiment nor aestheticism, but we must learn to get our money's worth. First cost and upkeep must take an equal place with practicability and efficiency. You can not get the highest efficiency out of any class of wearing surface unless you have a rigid, permanent base, and nothing but Portland cement concrete will give this.

King County, Washington, has paid dearly to learn this, and a number of California counties have expended immense sums in bituminous base experiments that would have been better put into concrete.

California is just undertaking one of her first pieces of standard roadways with a concrete base. A number of counties in Washington, Idaho, Utah and Oregon are building, or have built, concrete roads of various types, and in no instance have they abandoned concrete after once introduced.

been employed, although concrete base in several instances plain concrete has with brick, sheet asphalt, bituminous concrete or a thin coating of coal tar have been used.

The first cost of a permanent hard surface road with a Portland cement concrete base and a bituminous wearing surface will probably be about \$1.25 per square yard. To this should be added an average amount of at least 50 cents per square yard for grading, drainage, surveying and overheads. Of this amount less than one-fifth would be expended for cement, the ingredient that adds the permanency to the entire pavement.

About 50 per cent of the aggregates (crushed rock, gravel and sand) is saved, or can be dispensed with, if the cement is employed. A six-inch Portland cement concrete slab on a good subsoil will carry any load, whereas, it is common practice to lay a macadam road from 8 to 12 inches thick.

The upkeep and sprinkling costs of sustaining macadam and oiled roads make a bill that is a great and continuing burden. While these costs can not be entirely eliminated, they can be greatly reduced by building right from the go-in.

The money saved from the upkeep of a cheap road will greatly more than pay the interest on the excess of first cost of a model road, and it would provide as well a sinking fund to reimburse any extra amount originally expended.

We hardly read a live periodical these days without seeing some strong editorial favoring good roads. We clip the following from recent numbers of the Boston Monitor:

"One can easily imagine how greatly the adoption of a general system of permanent highways would facilitate the handling of light traffic in all localities of Canada and the United States; what a wonderful aid it would be to the handling of post parcels; how it would reduce the transportation rates upon farm products; what a marvelous effect it would have on the present high cost of living.

"There is really no reason why the problem of distribution should not be solved in this way, and solved to the satisfaction of all. With good, smooth roads between the cities, the towns, villages and open country could be brought into intimate association, exchange could be rapid and economical, and the intermediate charges that now add to the first cost from the moment an article is started upon its travels until it reaches the ultimate consumer could be eliminated. The original investment for smooth roadways, inter-urban and suburban would be large, but it would pay dividends. Meanwhile the railroads would be at greater liberty to develop their facilities for the handling of heavy freight, and in the long run they would be gainers rather than losers by relief of the congestion now caused by the handling of short-haul business."

(Note—We have for gratuitous distribution—and will be pleased to mail to any of our readers—copies of a speech made by Mr. Logan Waller Page, Director of Good Roads of the United States Government, as well as those of Messrs. E. N. Hines, Commissioner of Roads of Wayne County, Michigan, and Engineer J. S. McCullough of Pon du Lac, Wisconsin, all treating of the advantages of using Portland cement concrete in permanent roadways.)

Experts of the Department of Agriculture advocate the use of lime in a limited and experimental way in every locality.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

AUTOMOBILE SHOW AT CALIFORNIA STATE FAIR.

The automobile industry is taking such an important part in the business of the California farmers that automobile exhibits at the State Fair are being looked upon by both the salesmen and buyers as being one of the most important means of advertising to be had anywhere. The automobile show this year will probably be one of the largest demonstrations there ever was in the State, and yet it will be only one department of the State Fair.

When the Fair buildings were erected a few years ago there was no provision made for automobile exhibits, so consequently the showings heretofore made have been in tents erected on the grounds. This year the largest tent obtainable in California has been leased by the State Agricultural Society, and will be erected on the big lawn extending from the main entrance of the park to the Machinery hall, and will be somewhat larger than the main pavilion itself. It has already been found that this tent will not hold all of the automobile exhibits that would like to come in. One agency in Sacramento alone has made application for space to show twenty different styles of automobiles. Automobile accessories will have their space in the improvised automobile pavilion.

The automobile competition or race from different parts of the country to the fair grounds will receive the endorsement of the Automobile Association of America, thereby assuring its success. Amateur drivers from every city in the State will be invited to participate. The race will be arranged on a schedule of points, so that every starter will have an equal advantage whether he comes from fifty miles away or a distance of 500 miles. The automobile parade at night

will be one of the new departures in State Fair entertainment, as well as giving the automobile show another important part on the program.

The automobile trucks, which are finding room on California farms, will be made part of the general vehicle display. A complete show of trucks will be part of the Fair, and the farmer or city person who is interested in automobiles will find at the State Fair this year a show that will mean money to him.

THE POTATO.

"The Potato" is the title of an elaborate book written by Eugene H. Grubb and W. S. Guilford. The book contains 550 pages, and is well illustrated. Probably never before has such a great amount of information on this single subject been printed between two covers. The information is the result of extensive research in every section of the United States and in some portions of Europe. The book covers the subjects of potato soils, seed stocks, preparation and planting, cultivation, irrigation and harvesting thoroughly, and then goes further and discusses the various potato producing districts, the various uses for potatoes, and even includes a chapter of recipes for cooking the tubers. Published by Doubleday, Page & Co., New York. Price, \$2.20 postpaid.

POULTRY SHOWS.

San Jose, Cal., Oct. 9-14, 1912—Charles R. Harker, Secretary.
Oakland, Cal., Nov. 25-Dec. 1, 1912—C. G. Hinds, Secretary, 434 42d street, Oakland, Cal.
Petaluma, Cal., Dec. 5-8, 1912—H. R. Campbell, Secretary.
Fresno, Cal., Dec. 11-14, 1912—Russell Uhler, Secretary, Fresno, Cal.
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POULTRY DEPARTMENT

The Indian Runner Duck In California

Breeders Tell of Splendid Utility Qualities—Suggestions Regarding Feed and Care.

INFLATED DUCKOLOGY.

The Live Stock and Dairy Journal—"Lay in winter, don't mind cold feet, need no houses, eat cheap feed, no diseases, \$10 profit per bird."

These and a thousand similar statements are the greatest foe known to the Indian Runner duck industry today. It is true that they lay in winter, will eat cheap foods such as slops, etc., if obtainable. But while they like rain and water, if you get best results you must have a good, warm house for protection from storms and cold feet in winter, and from sun in summer. While they are not very likely to have any disease, a little carelessness, or a little sour meat scraps, will certainly result in a heart-rending experience.

When but a boy I listened to big men talk of rapping a hollow tree with their canes and watching the coins roll out, but really I never saw it. In fact, to succeed with ducks or anything else, requires thought and practical methods, combined with constance and care. I must say that some men seem to make money at every turn, but the average man, as myself, must watch his corners and give diligence to his calling, if he meets with even limited success.

First I will mention housing. Many houses may be planned, but any good, dry, well ventilated structure may be used. Have your house arranged in such a manner as to admit summer winds for cool shade, and to exclude winds and absolutely all water in winter. On the floor keep several inches of dry straw, chaff, weeds, leaves, or any suitable thing. This must be changed frequently, as ducks soon foul any quarters. In summer they will hunt the house, but in winter you must hunt them. Compel them to go in early in the evening and keep them there until about 9 o'clock in the morning, at which time they have practically finished laying.

As to feed I am not much of a balanced ration crank. I feed to growing ducks one-half bulk of rations, finely cut green clover or alfalfa. Remaining half a mixture of ground grains and rolled barley and meat scrap is thoroughly mixed with the clover, which is then made into a moist mash by addition of slops, milk or water—preferably milk.

To laying ducks is given the grain and meat scrap mixture straight, and the green food by itself so they may eat it at their discretion. Be sure to vary the grain ration, for you know variety is the spice of life. And here a suggestion: Price the feed stuff and buy the cheapest feed for the money. This does not mean the cheapest by the hundred pounds by any means, but get at the food value of the different articles and figure from these. One thing more, do not forget fresh water and sand or its equivalent. Do not feed much corn meal in summer. Feed some oil cake meal during moult. Feed little, if any, whole or crushed grain to laying birds. Ground grains are better. Stewed vegetables are good.

In short, work for economy and variety, never forgetting fresh water, shade, sand, animal protein and green stuff.

Some may say this sounds like talk at random, but we are working for

results, and are getting them. Our ducks begin laying at 4½ months, and this morning I took an egg each from one pen of hens that are now 1 and 2 years old, some of which are in the middle of their moult. This is good enough for me, but they have care. And of the whole, 50 per cent of our ducks are laying at present, and many are moulting.

We keep no individual records, but at one time it was convenient to keep tab on a certain duck which laid sixty-five eggs in sixty-eight days, and then went to setting. Letting her follow her desires, she reared a nice little flock and went to work again. Later experience with her told that if she is shifted to another pen for a few days she will be laying soon.

We do not claim to be authority on ducks, but are learning, and simply wish to promote the industry.

I hope every journal boosts the duck and helps to put it on the round it deserves.

One word more. Join the California Indian Runner Duck Club and reap its benefits, besides benefitting the industry. W. C. BALDWIN.
San Joaquin County.



This cut represents a pen of the New Standard light Fawn-and-White Indian Runner ducks (Harshbarger strain), bred by Frank Toles, Ukiah, Cal. These birds were hatched May 2, 1911, and began laying September 16th, at 4½ months. The flock averaged to July 16th, 240 eggs each. At the end of their year's test the Journal will give their records in detail.

INDIAN RUNNER DUCKS ARE PROFITABLE IF GIVEN PROPER CARE AND FEED.

There are three distinct strains of Indian Runners—the Fawn-and-White, the Penciled and the White—but the first named is in the greatest demand on this coast, though as to laying abilities there is no difference, except in laying strains, similar to different laying strains in hens, for as a general proposition the Indian Runner is a prolific layer if treated well in feeding and general management, it being nothing unusual to find birds of that variety to produce from 225 to 275 eggs per season.

If a layer is to produce the highest number of eggs she is capable of giving she must have good care in feeding, housing and shade, or she may prove a disappointment to the owner through his lack of care.

Many people do not know that the Indian Runner eggs are of a flavor so nearly resembling hen's eggs that it is necessary to have the two kinds together to notice any difference, unless the epicurean be a connoisseur,

and it is to be regretted that such finely flavored eggs are not more widely known in the service of the table, for many people presume that all duck's eggs are alike, similar to the Pekins, which are leathery and tough in the white and somewhat strong in the flavor of the yolk when boiled.

Indian Runners do not weigh as much as the Pekins, for they average four to four and a half pounds each, but that bird is for its laying abilities, while the Pekin is for table qualities.

Ducks of any breed are easier to manage in many ways than chickens or turkeys, for they have practically no diseases if given ordinarily good treatment, including grit or sand, and shade in warm weather, though this does not mean the baby ducklings will not die, for they will if not well looked after during the first three weeks, especially in reference to right warmth at all times until they get some flesh on their frail bodies. Lice are unknown to them unless such vermin are given to them by a sitting hen.

Contrary to general opinion, ducks can easily and successfully be raised without water except plenty of it to drink, of which they must have enough to fully submerge their beaks.

Feeding of ducks for profit entails a little more labor than for hens, as a rule, because they do not do well on grain as a feed, but require crumbly mash with a small per cent of sand or fine grit mixed in, or they may have a pile of coarse sand to dig their beaks into instead so that digestion will be good.

Many combinations of mashes could be given, but the following is a good general mash for growing and mature ducks:

White bran, 50 per cent; shorts, 25 per cent; feed meal, 20 per cent; blood meal, 5 per cent; a little sand or grit, a little charcoal and plenty of cut green stuff, all mixed together dry, the water added to make a crumbly mash. The same for morning and evening, with green stuff at noon and plenty of cool, clean drinking water at all times.

A higher percentage will be had from hatching under good hens, as a rule, than in an incubator, but the baby ducklings should be taken from the mother hen as soon as hatched and placed in a warm brooder for a day or so, as many hens are clumsy and the ducklings are easier crushed than baby chicks.

Baby ducklings should have nothing but a little water to drink for the first twenty-four to forty-eight hours. In fact, they will not, as a rule, begin to eat before two days have elapsed, the yolk in the hatching process giving them sustenance, and the first feeds should be bran 60 or 70 per cent, a little shorts, a trifle feed meal, a little charcoal, a small quantity of beef scrap and some green stuff cut very short, all mixed well with water to make a crumbly mash, and not forgetting a small lot of coarse sand in it, which must be added every time.

If they are given right warmth and fair cleanliness they will thrive and grow fat, while as to profits they are good and sure to the man or woman who does not forget the essentials mentioned.

THE POULTRY SPECIALIST.

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MR. AND MRS. W. S. SULLIVAN,
100 Market Street, Agnew, Cal.
Santa Clara County.

The Live Stock and Dairy Journal—Regarding my experience with Indian Runner ducks, I must say, as far as I have gone, being new in the business, that they have hens "beat to a frazzle" when it comes to laying eggs, both in number per duck and in size. A year ago this spring I began hatching (March to July). I got out about 300. First I sold my drakes, excepting those I wanted as breeders, then sold the culls, keeping only 150 of the best Indian Runner type as my layers and breeders. They began laying in December, and kept increasing until by January 28th I was getting 120 to 135 eggs per day. Up to the present writing they have averaged 100 eggs per day, but they sure do eat when growing, and if there is any "cheap feed" for young ducks I haven't found it. But as they are fully grown and feathered out by the time they are

Questions and Answers

EDITED BY A. H. CURRIER.

A valuable and instructive feature of our Poultry Department is "Questions and Answers." Any of our subscribers desiring advice or information upon any matter pertaining to poultry raising will please address Poultry Editor, The Live Stock and Dairy Journal, Sacramento, Cal., and answers will be printed in this department.

Eight or ten weeks old, you can see that they need all the good feed they can eat. I had one to lay at 4 months and 4 days, but I don't encourage them to lay that young, as I think they do better when fully matured.

They do best for me in small flocks—from ten to twenty in a flock is enough. They are a nervous scary bird, and need careful handling. They do not like strangers, and they do not like change in their rations. I have had mine fall short twenty or thirty eggs per day by having a young friend who was visiting us feed them, and the same thing happens when I change feed, especially if it is something they don't relish. After finding what they do best on, stick to it.

My percentage of loss has been small, mostly due to rupturing from laying too large eggs. I have had them go lame or get sore eyes from sleeping on damp ground, but that passes off when they are put into a dry, warm place. They may not mind wet feet, but if you want eggs in winter they must have dry, warm sleeping quarters. Ducks to do well must have plenty of fresh drinking water, little shell, sand or grit, charcoal and green feed. I feed laying ducks:

30 per cent fresh cut green stuff;
15 per cent ground oats;
15 per cent corn meal;
15 per cent bran;
10 per cent meat meal;
10 per cent charcoal;
4 per cent coarse sand;
1 per cent salt.

All mixed to a crumbly mass and fed twice a day, as much as they will eat clean in twenty to thirty minutes.

I ship my eggs to the city and get "extras" for them.

C. F. LAWRENCE.

Sebastopol, Cal.

THE INDIAN RUNNER DUCK.

The Live Stock and Dairy Journal—This remarkable breed of fowls has been called the Leghorn of the duck family. Considering their size and weight it is remarkable the size and number of eggs some of them will lay in a year. The writer, having secured six hundred and twelve eggs in exactly one year from the time they commenced laying from two runners of the Fawn-and-White variety, by actual record, knows that some of them are veritable egg machines.

These ducks, laying a large white egg (the writer is informed that some strains in the East lay a green tinted egg which, of course, would be objectionable) should become very popular as egg producers.

Right here the writer would bear testimony against the more or less prevalent idea among the uninformed that their eggs have a strong taste or flavor. On the contrary, they have a pleasant and agreeable taste.

One thing that should have the serious consideration of the breeders and friends of the Indian Runner is the marketing of the eggs in a commercial way. In our local markets eggs are graded as firsts and seconds, duck

eggs being graded as seconds. This is unjust, at least in respect to the Indian Runner eggs. They should have a grading as extras in accordance with their size and quality.

Just recently there appeared in a popular journal, in answer to some inquiries, some reports from a number of dealers in San Francisco, stating that there is no market for duck eggs. This makes me wonder what they do with the duck eggs shipped to them, graded, according to their instructions, as seconds.

Considering the present marketing facilities for the eggs, those who are so situated as to be able to make the feeding ration largely of green feed or cooked vegetables, etc., will find the Indian Runners more profitable than those who have to depend on mill feeds, etc. As ducks have no crops, the feeding of whole grains is not as satisfactory as ground feed, though cracked corn or wheat may be fed to them, soaked in water, about once a day.

The writer has found the following mash very satisfactory, fed quite moist three times per day:

Ground corn, two parts; bran, three parts; middlings, one part; beef scrap, blood meal or fish meat meal, three-fourths to one part, all by measure, with some grit, ground oyster shell and charcoal added. Kale or lettuce, etc., cut fine and fed in water is much relished by ducks.

Care should be taken in very warm weather not to let the above mash stand long after mixing with water, as it is liable to sour on account of the corn. I have sometimes used cracked corn in place of ground, also some cracked wheat in its place. Milk could well be used in place of all or part of the meat feed.

The Runners stand confinement very well, and it is not necessary to have high fences for them.

Young ducklings do not require much mothering, as they have their own way of eating and do not scratch for it like chickens. They should have plenty of water to drink, but it should be given to them in some manner in which they can not get themselves soaking wet with it. In fact, they should not be soaked until they are feathered out. Ducks like to play in water, but it is not necessary for them to have a swimming place.

Regarding the different varieties of the Runners, I would say that from my experience the Fawn-and-White seem to be better egg producers than the White, though some will prefer the White on account of their breeding true to color, whereas the others should be selected for color.

The origin of the Indian Runners, as well as the different varieties of them, does not seem to be altogether clear, as authorities differ on the subject.

J. W. BRAMHAM.

Sebastopol, Cal.

It pays to supply the fowls, especially growing ones, with charcoal, ground bone, either fresh or dry; oyster and clam shells, and a continual supply of best grit.

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Dr. Prince T. Woods, one of the best authorities on poultry, writes exclusively for American Poultry Journal, and conducts the "Question and Answer Department," "Poultryman's Calendar" and various other departments; he also writes some striking editorials each month. The "Home and the Table" and "Woman's Success With Poultry" departments are conducted by Mrs. Helen T. Woods, and prove exceptionally interesting to every woman who wishes to attain success as a good cook or in the poultry business.

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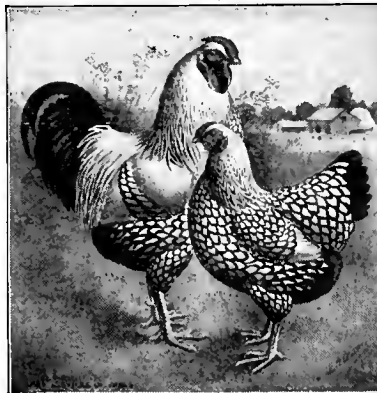
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Poultry Breeders' Directory

Under this heading, for a nominal charge, payable in advance, we will insert names and addresses of breeders of various varieties of poultry. This is done for the convenience of owners of flocks who wish to keep their names before the public the year round. Display advertising is undoubtedly the big business getter of today, but no doubt there are many breeders who are not justified in carrying a display ad during the entire year. To such breeders the economy and convenience of this column is readily apparent.

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J. H. Meyer.....R 3, Modesto, Cal.

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Jack Lee.....R. 3, box 58, Petaluma, Cal.

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It is the Indian Runner Duck that is in Demand Today

(By Frank Teles, Ukiah, Cal.)

The object of this article is to bring before the people a subject which means thousands of dollars to them. There is no more profitable bird kept on any farm than the Indian Runner duck, but buyers should know the demands of the people before they buy and avoid buying something they can not sell profitably after they become established in the field.

The only duck to consider today is the duck that is now admitted to the American Standard, and, furthermore, we must say the only duck to consider today is the duck that lays a pure white egg.

Why waste time and money investing in anything less in demand, and thereby less profitable? Any bird, other than a pure white egg layer, is of inferior quality and will prove a money loser to you. Be careful about the selection of either stock or eggs. The country is flooded with inferior stock now being advertised as the "true Fawn-and-White." This is misleading to the people who are not familiar with Indian Runner ducks, because they are not the new standard color, but are Brown-and-White, and many of them lay green eggs, for which there is no demand.

The cheapest way to get a start is to buy eggs of a well known breeder of these new Standard Indian Runner ducks that are guaranteed producers of pure white eggs only.

I will give you, as briefly as possible, the habits of the Indian Runner as a dry land duck, directions for hatching, brooding and feeding, housing and utility value. The Indian Runner is an excellent forager when given free range, and their ability in this line strongly recommends them to the poultryman, and particularly to the farmer. They are unlike the old "green head" that we used to have on the farm that would stand and shovel in the feed as long as they could see. The Indian Runner is off on the run after bugs, digging after grass roots and foraging for her own living. On the barren plains of India, the original home of the Indian Runner, where vegetation and insect life are scarce, the ordinary type of waddling duck, being unable to forage so far, would long ago have starved to death.

Hatching the Indian Runner is very similar to hatching any other duck. They may be hatched with incubators or hens. Either method may be used, but for small amounts I prefer good setting hens for best results. If hatched in incubators, follow directions carefully for hatching duck eggs. If hatched under hens the last fourteen days the eggs should be sprinkled with lukewarm water each day, sprinkling eggs and nest thoroughly.

When you remove the ducklings from the incubator or from the hen be careful not to get them chilled, for a chilled duck is a dead duck. Keep them in a warm, even temperature for several days. Ducklings should not be fed until thirty-six hours old. Always water them immediately after feeding. For the first five days feed stale bread moistened with milk, then add wheat bran and shorts, equal parts to the bread and milk until they are five weeks old, when they should have a mash made of four measures wheat bran, three measures shorts or middlings, one measure corn meal, one measure beef scraps and one-fourth measure fine, sharp sand; mix with water to a thick, crumbly mass. Feed every two hours when young. Give them warm water until they are four weeks old. Make small troughs and stretch one-inch mesh wire over them, so that they can get their head into the water and keep them from getting their feet wet, as that means death to a duckling. Their nostrils clog with food and dirt, so the water should

be deep enough for them to immerse their bills. As they grow older accustom them gradually to the outside temperature.

After three weeks old the ducklings are very hardy, and need only ordinary attention until five weeks old, when they begin to feather. This is a critical time. Give them plenty of beef scrap in their feed to keep up their strength. Young ducks should have plenty of sunshine, but should be provided with shade to prevent sunstroke. They should never be allowed to get wet, for they are easily chilled. Keep them in a clean, grassy pen when the weather is warm enough for them to be out. Good food, water, even temperature and clean bed are the main requirements. Housing the Indian Runner duck is not difficult. Unlike the chicken, they require in their house no nests, no roosts. In fact, no furniture whatever. They have no lice, no mites, no cholera and no roup. The house need not be high. In fact, a low house is better. The principal requirement of a good duck house is that the floor be dry and well covered with clean litter, something like straw.

The final test for any fowl is its utility value. Though the Indian Runner duck has many fancy qualities, her chief claim is not beauty, but usefulness. Being a small duck, she can not claim superiority for feather production, but she more than makes up for this shortage in the quality of her flesh for table use, and in the quantity of eggs produced. As a table fowl the Indian Runner is the sweetest of meats. She has less of the undesirable fat of the larger ducks and more pure protein or lean meat. To taste a roasted Runner is to never forget the pleasure. The Indian Runner as a fancy fowl, as a table delicacy and as an egg producer has few equals and no superiors.

The Live Stock and Dairy Journal—The Indian Runner duck is a worker, and is to be commended to the poultry raiser.

If regularly cared for and given what is needed it is no more noisy than any rooster, and is much more quiet than the Pekin. As for table use, a young Indian Runner drake (no one would think of eating a duck) of six months is about as fine as one could wish. The frame is not so large as a Pekin, but the flesh is firm and compact.

The ducks begin to lay sometimes as early as 4½ months, but should all be at work at six months, and they are said to keep up their usefulness for seven or eight years.

A pen of nine ducks I owned laid in twelve months 253 eggs apiece, and we moved them in the height of their laying, throwing them off for ten days. They moulted six weeks in the middle of summer, when there were no eggs. They will average twenty-seven and twenty-eight eggs a month.

People think duck eggs are strong, but forget that they must be cleaner than hen's, as they will not eat what hens will eat, and they never have euberculosis, which can not be said of hens.

They need more water than chickens. A tub big enough for them to get into and splash will keep a pen of eight or nine happy and clean, and give them a chance to exercise. They are very fond of having it fresh, I can tell you, being loath to bathe in dirty water. Ground charcoal, grit and oyster shell must always be kept within reach. Plenty of green stuff is also necessary.

A soft feed made up of alfalfa meal, corn meal, meat scraps and bran should be the main feed.

Young ducks are tender, and for the first two weeks should be kept warm, not allowing them to be chilled. It is no effort for them to die if allowed to get cold. Dry feed and just enough water to drink should be given every two hours, giving what they will eat up clean. They do not need to have much room to run, as they are not as lively as chickens. Do not forget fine grit or sand in the feed, and keep warm.

Any one desiring eggs of fine quality and flavor in goodly numbers should try a flock of Indian Runner ducks. ANNIE M. SULLIVAN, Oakland, Cal.

THE CALIFORNIA INDIAN RUNNER DUCK CLUB

The California Indian Runner Duck Club was formed at Livermore last February. Its objects are as follows:

First—To forward the interests of all three varieties of Indian Runner ducks, retain the Fawn-and-White and urge admission to the Standard of the English Brown Penciled and the pure White, believing all three have valuable qualities worth propagating.

Second—To place the large White Indian Runner eggs averaging at least two pounds per dozen at the top of the market in price, a place they already occupy in size and quality.

Third—To place in separate classes all three varieties at our exhibitions throughout the State and at the World's Fair Poultry Show, and give them equal privileges as compared with other breeds of less merit.

The officers are as follows: President, Egbert A. Smith, Napa; Vice-Presidents, Mrs. M. E. Plaw, Fruitvale, D. E. Cadwell, Los Angeles, W. C. Baldwin, Lodi; Secretary, Annie M. Sullivan, R. F. D. box 328, High Street, Oakland; Treasurer, A. H. Currier, Santa Rosa. The Executive Board is composed of the President, Secretary, Treasurer, C. F. Lawrence of Sebastopol and H. H. McKinney of Ukiah.

All breeders and admirers of the Indian Runner duck are invited to unite with the club (fees \$1 per year) by corresponding with the Secretary.

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WHY let your chickens and turkeys die of roup, black head, diphtheria or other contagious diseases, when you can easily cure them with **DR. WHEELER'S SPECIFIC** in the drinking water. Price \$1, and 5 cents postage, by J. E. HOLT, SUNLAND, CAL., who gives expert advice with it free. Also for White Diarrhoea of baby chicks, and cholera he sells the finest remedy at same price. Both are remedies that cure. State full symptoms and feeding, in any disease, and he will help you. J. E. HOLT, SUNLAND, CAL.

SQUIRREL KILLER—Let me tell you that I manufacture a squirrel poison that is sure death to squirrels, gophers, mice and rats. I am making a poison according to the Government formula, as published by the State Board of Health in the Bulletin of 1911. I want to say that the formula I use has been given the hardest kind of test at the Experiment Station, and it "delivered the goods," and is the formula now used by the State Board of Health. You can take a label off one of my cans and verify this. I buy my ingredients in large quantities. Ask your dealer for Ingwerson's Squirrel Killer. If he can't supply you, send me your order. Sold in cans, 1 gallon, price \$1.25; three gallons \$3.50, and five gallons \$5. Make money order payable to W. F. Ingwerson, Sole Mfr., Visalia, Cal. Write for literature.

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No matter where you live in California, Arizona, New Mexico, Utah, Nevada, Idaho or Oregon, the Classified Advertisements in the JOURNAL are read by your neighbors. Perhaps some one within ten miles of your home wants to buy just what you want to sell, and would buy from you if he knew what you have. Tell him what you have through this classified page.

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O. I. C. PUREBRED REGISTERED HOGS—Young stock, both sexes. Write for prices. Pedigrees guaranteed. Best foundation stock in State. J. W. Bennett, R. 2, Modesto, Cal.

SWINE FOR SALE—I can provide you with Poland China, O. I. C. Hampshire and Berkshire young stock of both sexes. Purebreds. Prices right. Jas. Willson, R. 4, Modesto, Cal.

WHEN YOU DESIRE SWINE, remember that I am a breeder of purebred O. I. C., and can supply you with young sows and boars out of famous dams and by prize winning sires. Best Eastern and California blood. Write for prices and pedigrees. Can give immediate delivery. R. A. East, R. 2, Modesto, Cal.

O. I. C. HOGS—I breed purebreds only. All registered, and papers go with all sales. Sire, Creamery Sport, whose sire is Martin Sport; dam, Pansy Blossom. Have six 1-year-old sows for sale. Also young stock coming along. Write me to reserve your orders for young stock of both sexes. M. A. McLean, Route 5, Modesto, Cal.

FOR SALE—Registered service Jersey bulls and bull calves from prize winners and big producers. Unregistered Jersey bull calves at \$25 each from registered sires and choice Jersey cows. Dairyman's opportunity. Seventy acres choice Mokelumne River Bottom Land; will produce five crops alfalfa without irrigation; improvements, two large stock barns, skimming station, house, sheds, Bartlett pear orchard.

Gaited saddle, driving and business horses. A licensed imported German coach stallion. N. H. Locke Co., Lockeford, Cal.

FOUR PUREBRED HOLSTEIN BULLS FOR SALE—All registered and papers go with sale. These fine individuals were raised by the well known breeder, C. T. Brown of Porterville. Pedigrees and ages follow: Captain Zampa Ormsby (92136), 16 months, sire Silentshade Cantate (57777), dam Lady May Ormsby (147168). I have also a 2-year-old, Hartog Ormsby, sire Sir Skylark Ormsby Hengerveld (39138), dam Leda Hartog De Kol (135401), and two 16-month-old fine young sires by Silentshade Cantate. For quick sale, \$100 to \$150, according to age and pedigree. Write or call on J. A. Pollard, Modesto, Cal. Ranch one mile from town.

JERSEY BULL CALVES FOR SALE—By such sires as Mona's Topper and Oxford Victory and others, by famous sires and out of real cows. Write or call. Weaver Stock Farm, Brawley, Imperial Co., Cal.

FOR SALE—Registered Holstein bull calf. Write for pedigree and price. Also registered Berkshire boar pigs by Silver Tips Duke, out of Silver Tips 185th. Address, V. A. Peterson, Blacks, Cal.

HOLSTEIN BULLS FOR SALE—Purebred, registered, fine young fellows. For years and years I have given attention to building up a herd of Holsteins. It has been my life work. Have a son of Princess Ziska, also a son of Lady Bountiful Faskie, sired by Modesto Boy. Also yearling by Constance Sir De Kol. M. A. McLean, Route 5, Modesto, Cal.

A NOTED JERSEY HERD FOR SALE—Consisting of cows, helpers, herd bull, heifer and bull calves of Golden Fern, Sultane and St. Lambert blood. None better. Address Tribble Brothers, Elk Grove, Cal.

FOR SALE—Registered Shorthorn bulls and Berkshire hogs. Bred for size and quality. Place your order now for spring pigs. H. L. Murphy, Perkins, Cal.

FOR SALE CHEAP IF TAKEN AT ONCE—One large, very heavy boned black Mammoth Jack; age, 5 years; and one smaller Jack. Excellent breeders. Colts to show for both. Also three nice Jennets, bred, and two fine Stallions. One registered black Percheron; was twice winner of second premium at California State Fair. C. E. Ruggles, Winters, Cal.

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DIXON DAIRY FARMS

20-acre tracts of rich, level ALFALFA LAND at Dixon. All rich, level, sediment land. Close to town. Worlds of water available for pump irrigation. School across the road. Price range, from \$125 per acre and up. Easy terms on all of this tract. Only a few left. Write for further information.

All kinds of improved and unimproved lands for sale, suitable for dairying and alfalfa.

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THE MODESTO CREAMERY has been a big factor in promoting the prosperity of the dairymen of Stanislaus County. Homeseekers and California dairymen invariably call on this popular institution when about to locate on the lands of the Modesto-Turlock Irrigation District—a district famed throughout the West, where the dairymen can "do better," surrounded by water, wealth, contentment and health. Co-Operative Contesting Association a feature. Lowell Gum, Mgr., Modesto Creamery, Modesto, Cal.

FARM LANDS.

VALUABLE INFORMATION contained in our monthly Farm List. Gives reliable data on California agricultural industries, with large list of farms for sale adapted to the various branches of agriculture. Send in your name and address and a copy will be mailed to you postpaid. California Colonization Company, 1114 Tenth Street, Sacramento, Cal.

LARGE AND SMALL FARMS, grain and dairy ranches for sale in Modesto and Turlock irrigation districts. Terms and prices on application. Stanislaus Real Estate Company, Modesto, Cal.

BEAUTIFUL ORCHARD HOME—10 acres orchard in Orangevale, Sacramento County, California, planted to 900 almond trees (paper and softshell), 2500 grape vines (Emperors, Bl. Moroccos, Tokays, Missions), all in full bearing; also figs, prunes, apples, pears, oranges, persimmons, Chinese dates, etc., etc. A 1½ story, 5 room house, bath and pantry, hard finished inside, large basement; windmill and tank; water piped through house and for irrigation; stables, packing sheds, chicken houses, sulphur house, 2 fine horses, wagons, implements, tools; complete in all details. This place has to be investigated to appreciate what a bargain it is; annual income over 25 per cent on investment. New electric R. R. station ¼ mile. Price only \$5250.

Address: Owner, Box 1, care The Live Stock and Dairy Journal, Sacramento, California.

TWO BARGAINS—10-acre tract of mature Tokays in Sacramento County. Price only \$2200.

10 acres—2½ acres in pears. Balance in hay; all fenced; fine orange or olive land. Price, 2000. Easy terms on either of these.

R. D. McFarland, Folsom, California.

A REAL BARGAIN—\$40 acres all under fence; 100 acres meadow land; 100 acres can be cleared off with little expense, and can be planted to orchard of 1,000 trees and not interfere with meadow. Four living springs with running water the year round. Irrigation is unnecessary. Six-room, story and a half house; two large barns, large wagon shed, granary, potato house, milk house and blacksmith shop, all in fair condition. Meadow subdivided into six pastures. Hay sells at \$16 to \$20 per ton year round and ready market at these prices. This property is located in Calaveras County, 2½ miles from school and post-office on main road. Several thriving towns within a radius of twenty miles; 18 miles from nearest railroad. This place is particularly adapted to dairying and the raising of hay, apples, potatoes and vegetables. From the only apple tree on the place 1100 pounds of apples were taken last year. The ranch products, such as milk, butter, eggs, potatoes, vegetables, etc., can be disposed of at the lumber mills at good prices. There are at least 200,000 cedar posts on the place, valued at 12 cents each. The timber alone on this place is valued at \$6,000. The price of this property is \$7,500 cash, or one-half down and balance mortgage at 6 per cent net. This place is worth \$8,000 of any man's money.

For appointment to see the property address Owner, Box 4, care Live Stock and Dairy Journal, Sacramento, Cal.

The increasing demands from foreign countries for Argentine beef bid fair to leave the country without cattle sufficient to supply local needs. The President of the nation has instructed the Minister of Agriculture to investigate the matter and make such recommendations as the situation may warrant. Various societies interested in the cattle industry have also taken the matter under advisement, so serious has the situation shown itself. Reports received from many of the investigators substantiate the statement that the annual slaughter of cattle by packing companies far exceeds the increase of the herds for the same period. Legislation looking to the limiting of the number of cattle slaughtered to the number represented by the yearly increase is proposed as the sole solution.—Buenos Aires Dispatch.

Market Review and Forecast

SAN FRANCISCO DAIRY PRODUCE MARKET.

OFFICIAL FIGURES OF SAN FRANCISCO WHOLESALE DAIRY PRODUCE EXCHANGE.

Note—The butter quotations below are on California Extras, upon which butter-fat prices are based.

	BUTTER.	EGGS.				CHEESE.			
		Cal. Extras.	First.	Seconds.	Selected Pullets.	Cal. Flats.	Cal. Flats.	Cal. Y. A.	Cal. Y. A.
July 5..27	25	23	19½	21½	14	13½	17	15	
July 6..28	25	23	20	21½	14	13½	17	15	
July 8..28½	25½	23	20	21½	14	13½	17	15	
July 9..28½	26	23	21	22	14	13½	17	15	
July 10..28½	26	24	22	23	14	13½	17	15	
July 11..28	26	24	22	23	14	13½	17	15	
July 12..28	25	23	21	23	14	13½	17	15	
July 13..28	25	23	21	23	14	13½	17	15	
July 15..28	25	23	21	23	14	13½	17	15	
July 16..28	25	23	21	23	14	13½	17	15	
July 17..28	24½	23	21	22½	14½	13½	17	15	
July 18..27½	24½	23	21	22½	14½	13½	17	15	
July 19..28	24½	23	21	22	14½	13½	17	15	
July 20..28	24½	23	21	22	14½	13½	17	15	
July 22..28	24½	23	21	22	14½	13½	17	15	
July 23..28	24½	23	21	21	14½	13½	17	15	
July 24..28	24	23	21	20½	14	13½	17	15	
July 25..28	24	23	21	20½	14	13½	17	15	

TOTAL RECEIPTS AT SAN FRANCISCO WHOLESALE DAIRY PRODUCE EXCHANGE.

Week Ending—	Butter. Lbs.	Eggs. Doz.	Cheese. Lbs.
July 11.....	627,000	412,740	382,900
July 18.....	652,200	417,060	326,000
July 25.....	758,100	461,670	323,700

HAY MARKET.

Somers & Co., San Francisco, say:

Although receipts of hay during the past week were not quite as heavy as the week previous, yet considerably more hay has arrived than for a long period, with the exception of last week. This week's arrivals total 4537 tons, whereas those of the week previous amounted to 5083 tons. Local trade is not sufficient to move this quantity of hay at the prices which must be asked in order that operators may dispose of their purchases without loss. Consumers are still backward about buying, and although one or two have arranged for their season's supply, yet the majority of the larger consumers have evidently determined to purchase their hay during the year from month to month, preferring to pay a little more from time to time as is necessary, rather than take chances on buying their hay at these prices and then making a loss by reason of a possible decline, which would probably be occasioned by an open winter with plenty of green feed or by the importation of hay from outside states.

Although considerable hay is being sold out in the country, yet this is principally for local use, and for shipments to supply immediate needs. Some little is being stored away, but

this, with one or two exceptions, is simply for the purpose of dealers to have stocks upon which they can draw when all the hay is warehoused. The general opinion seems to be that speculation in hay at the present prices is not desirable, for although there is a chance for a small profit there is at the same time a chance of making a serious loss.

Alfalfa is beginning to arrive quite freely from the river, and is being placed on sales previously made. But few dairymen have arranged for their supply of alfalfa, and many claim that they will use local grain hay instead of alfalfa this year, as the price of alfalfa, with freight added, is in many instances greater than the cost of local grain hay.

We quote the range of local prices weak on the following basis:

Choice wheat hay.....	\$19.00 to \$20.50
Good grade same.....	16.50 to 18.00
Other grades	12.00 to 16.00
Wheat and oat.....	12.00 to 18.50
Tame oat hay	12.00 to 18.50
Wild oat hay	12.00 to 15.50
Stock hay	9.00 to 11.00
Alfalfa	11.50 to 13.50
Straw, per bale35 to .70

A PROFESSOR IN POULTRY HUSBANDRY FOR UNIVERSITY FARM AT DAVIS.

Mr. J. E. Dougherty, instructor in poultry husbandry in Purdue University, Indiana, has accepted the position of assistant professor in Poultry Husbandry in the University of California, College of Agriculture, at a salary of \$1600 for the fiscal year beginning July 1, 1912. Mr. Dough-

erty was graduated from Cornell University, College of Agriculture, with the B. S. A. degree in 1910. During his High School course he maintained a flock of 500 fowls and 200 ducks on his father's farm in New York. At Cornell he was assistant in poultry during his senior year. For the first year after graduation he was assistant manager of one of the largest duck farms on Long Island, New York. He resigned that position to accept the one he now holds in the College



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I have the largest Jack and Jennet farm west of the Rocky Mountains, and am raising only the large, heavy-boned kind, and am selling them at reasonable prices.

J. E. DICKINSON,

FRESNO, CALIFORNIA



and Experiment Station at Purdue University.

Mr. Dougherty is highly recommended by Professor J. E. Rice, head of the Poultry Department at Cornell University. He has done both teaching and Experiment Station work, and also institute lecturing and poultry judging. He is expected to begin his new work in August. He will reside at Davis, and take charge of the well equipped poultry plant which has been established on the University Farm.

A short course in Poultry Husbandry begins September 23d, the same date with the beginning of other short courses. Professor Dougherty will co-operate with Professor Jaffa in giving instruction in this short course,

and likewise in the farm school, which is the three-year course for younger men and boys. Professor Dougherty has had considerable experience in institute lecturing and in poultry judging, a training which will help him greatly in getting into touch with poultry business and poultry people in California.

The prospect for good work in poultry at the University Farm is exceedingly bright. The plant is well equipped with buildings, including class and exhibition rooms, and now with a competent instructor in constant charge, most valuable results should be obtained. The new man comes with the best wishes of all California poultrymen.

The Live Stock and Dairy Journal

An Illustrated Monthly Publication for
the Advancement of the Live Stock,
Dairy and Poultry Industries
of the Pacific Coast.

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The Journal is stopped promptly at expiration of subscription period, unless remittance for renewal is received, thirty days' notice being previously given.

If you want to buy or sell any stock or merchandise in the great live stock, dairy and poultry centers of the Pacific Coast, get in touch with our advertising columns. We believe all advertising in this paper to be from persons or firms of the highest reliability. Every effort is made to protect our readers against misleading representation. We shall at all times appreciate evidence that advertisers have acted otherwise than in accordance with principles of strict business integrity.

The Journal is issued on or about the 15th of each month. Copy for all reading and advertising matter must be in our office not later than the 25th of month preceding date of issue.



THIS ISSUE.

This issue of *The Live Stock and Dairy Journal* contains the biggest amount of advertising of breeders of purebred stock of any issue yet issued. It contains the biggest amount of advertising of breeders of purebred stock of any issue of any paper yet printed in California.

These statements have a double significance. They emphasize the fact that the purebred stock breeding business is steadily growing in this State; they establish beyond a doubt the fact that *The Live Stock and Dairy Journal* is recognized as the one big exponent of **BETTER STOCK** in this great western empire.

The efforts of *The Live Stock and Dairy Journal* in stimulating the breeding of improved live stock in the western states have not been in vain. The breeders of purebred stock bear testimony to this by their continued liberal use of our columns for the purpose of offering their surplus stock for sale. Many of them have tried other mediums and have finally concluded that *The Live Stock and Dairy Journal* is the only one that they need in their business. Some of them have withdrawn their advertisements from other publications in order to increase their space in *The Live Stock and Dairy Journal*, or to enter into yearly contracts for space.

This is an age of specialization. *The Live Stock and Dairy Journal* has made a specialty of matters pertaining to purebred stock, and to the improvement of methods of breeding,

feeding and care of stock upon western farms. We have built up a special circulation among a class of people who are interested in better stock and better methods. Our breeder advertisers pay for a big circulation, but they know that a very large percentage of that circulation is among people who are interested in what they have to offer, and not among men and women whose greatest interest is in fruits or berries or grain production, or mining or manufacturing or some other distinct industry.

We appreciate the liberal patronage of the breeders already so well represented in our columns, and extend a cordial invitation to others to come in and join the big, prosperous family.

THE NEXT ISSUE.

The October issue of *The Live Stock and Dairy Journal* will be a real interesting and attractive one, for it will contain a detailed account of the live stock show at the California State Fair, together with illustrations of many of the animals that carry away the coveted prizes. The live stock show gives promise of being the biggest and best ever held in this State, and we plan to make our October issue the finest yet, especially from a pictorial standpoint.

EVERY ISSUE.

For the benefit of the several thousand people into whose hands this issue of *The Live Stock and Dairy Journal* will be placed for the first time, in connection with our big subscription campaign and our distribution at the fairs, we wish to state that every issue of the *Journal* contains many articles and items of practical information and value on live stock and dairy matters, together with a liberal number of illustrations. It is our constant aim to improve our publication at every opportunity, and to maintain for the benefit of our readers the highest possible standard. If you have not already enrolled your name as one of our subscribers we urge you to do so at this time.

AGRICULTURAL EDUCATION.

It is gratifying to read the announcement of the University of California that more young men are being trained by the University of California for agriculture as a life work than for any one other profession or occupation. Last year there were 322 students at Berkeley in the full four-year course in agriculture, 99 in the three-year high school course in practical farm subjects, given at the University Farm at Davis, and over 700 taking more or less instruction in agriculture at Berkeley.

This speaks well for the cause of advanced agricultural practice in this State, for each student that goes forth from the agricultural classes not only makes practical application of the knowledge he has gained, but gives others the incentive to take up agricultural studies or to adopt improved methods in their farm work.

With the coming of the new dean of the College of Agriculture, Dr. T. F. Hunt, a distinguished agricultural leader, and with the reorganization of the various departments of the college, we may look for still greater accomplishments along the line of agricultural education and science in California.

In this connection we are pleased to note that three new professors have been added in the Department of Agriculture of the University of Nevada as follows: Professor E. A. Howes, field husbandry; Professor L. T. Sharp, soil investigations; Professor V. E. Scott, dairy husbandry. It looks very much as if Nevada is coming to the front as an agricultural state.

THE LIMIT OF PRODUCTION.

What is the limit of production for dairy cows? That, perhaps, is the question most commonly discussed among dairymen everywhere.

We are told that originally cows gave merely enough milk to nourish their offspring until they were old enough to take other forms of food, and that the ability to yield large quantities of milk is an acquired characteristic. This being true, the great development of milking faculties that has been brought about through domestication are indeed to be wondered at. Gradually dairy cattle have acquired the ability to give more and more milk. When we stop to think about it, the likelihood of development far beyond the present capacity is no more improbable than the development to the present capacity must have seemed years ago. In fact, this acquired characteristic has become such a fixed characteristic that it should be transmitted with more certainty from generation to generation now than it was then. We have better sires and better dams now upon which to base our operations, and the process of elimination will go on and on, ever favoring the prepotent sire of proven ancestry and the dam that has demonstrated by her performance that she can deliver the goods.

Among the recognized dairy breeds new records of production are being continually made. For a time it seemed that production had reached the limit, and that new records could not soon be looked for, but nowadays the announcement of a new record is taken in a matter-of-fact way.

In looking over the Holstein records we note that fifty-three cows have made 30-day butter-fat records of over 100 pounds, and we are told that of this number eighteen were made during the year ending May 1, 1912. Several more cows have exceeded the 100-pound mark since May 1st. These figures indicate the progress that is being made along the lines of increased production in one breed, and the same degree of progress characterizes the other breeds.

Production may be increased in the common dairy herd just the same as it is being increased among the highbred cows of the various breeds, and the dairyman who does not recognize these facts and profit thereby is not doing his duty to himself or to the industry which he represents. Just as the cow has been developed to yield from the small quantity of milk necessary to nourish its calf up to exceed 3000 gallons of milk within the year, so may any dairy herd be gradually developed on and on. There is no limit.

THE GUERNSEY IN CALIFORNIA

The Guernsey may now be ranked with the leading breeds of dairy cattle in California. For many years there were but few Guernseys in California, but recent years have seen the establishment of some splendid herds here, and some of the very best blood lines of the breed are now represented in this State. These herds have made possible the distribution of many head of stock among dairymen in all sections of the State, and the breed is gaining a strong hold here. The same applies to all the Western States. We look soon for an organization of the Guernsey breeders of California, for through organization much could be accomplished toward promoting the interests of this excellent breed here.

Be sure to give your horse plenty of good water. You know yourself how it feels to be thirsty. Think what your poor horse may suffer if you do not give him enough water. He can not tell you, so you should think about it.

SHOWING AT THE FAIRS.

Mrs. M. E. Sherman, writing for the *California Cultivator*, makes the contention that nothing is to be gained by a farmer sending stock to the fairs "except the privilege of spending money," and then goes on to state some of the discouraging features that she has encountered in past years in connection with making live stock exhibits.

Honest criticism cannot be classed as a "knock," and as we believe that Mrs. Sherman is honest and sincere in the stand she takes, she can not be classed as a "knocker." Such broad statements, however, coming from a person of her prestige in agricultural matters is bound to create considerable sentiment against showing live stock at the State and county fairs. She has exaggerated the "discouragements," without emphasizing any of the benefits.

Conditions in the past have not been just what they should be at California fairs, but improvements are being made year by year, and objections are being fast overcome.

We believe that there is no one thing that does more to stimulate the production of improved live stock than the live stock departments of the fairs, with the educational value and with the attendant spirit of rivalry. Even though an exhibit is not productive of direct profit, the exhibitor should find much satisfaction in the fact that he is benefiting himself indirectly, and that he is doing a share in the advancement of the cause of better live stock.

Mrs. Sherman's article contains some suggestions of practical value that could well be adopted by California fair managers.

FAIR DATES.

Oregon State Fair—Salem, September 2-7.

Santa Clara County Fair—San Jose, Cal., September 5-15.

California State Fair—Sacramento, September 14-21.

Pacific Coast Breeders' Association—Stockton, Cal., September 23-28. (Races only.)

Washington State Fair—North Yakima, September 23-28.

Montana State Fair—Helena, September 23-28.

Wyoming State Fair—Douglas, September 24-27.

Fresno County Fair—Fresno, Cal., September 30-October 5.

Utah State Fair—Salt Lake, September 30-October 5.

Interstate Fair—Spokane, Wash., September 30-October 5.

Kings County Fair—Hanford, Cal., October 7-12.

Los Angeles, Cal.—October 14-19.

San Diego, Cal.—October 21-26.

Inter Mountain Fair—Boise, Idaho, October 7-12.

International Dairy Show—Milwaukee, Wis., October 22-31.

National Dairy Show—Chicago, October 24-November 2.

Texas State Fair—Dallas, October 12-27.

Arizona State Fair—Phoenix, November 4-9.

Pacific International Dairy Show—North Portland, Ore., November 18-23.

International Live Stock Exposition—Chicago, November 30-December 7.

Panama-Pacific International Exposition—San Francisco, 1915.

Leonard W. Eskridge of Sacramento has been appointed assistant manager of the poultry show at the State Fair. Mr. Eskridge has served in the position at five previous Fairs, and has always worked hard to make the show a success.

THE LIVE STOCK and DAIRY JOURNAL

The Big Live Stock
Dairy and Poultry
Magazine of the
Pacific Coast
Established 1901

Volume 11

SACRAMENTO, SEPTEMBER, 1912

Number 9

California Holstein Makes New World's Record

A new world's record has been made by a Holstein-Friesian cow, owned by A. W. Morris & Sons, Woodland, Cal. Their cow, Arolia De Kol, has just completed an official test of one year and made the wonderful world's record milk production of 28,065.9 pounds, thereby exceeding by a liberal margin the amount of milk ever produced by any cow in the world on official test for a like period. This milk yielded 10.18 pounds of butter-fat, which is not far short of the world's record. On the seven day test eight months after calving, Arolia De Kol made 96.1 pounds of milk and 20 pounds of butter-fat, a record surpassed by only one cow in the world.

There are a number of remarkable features about the performance of this cow. The first to be taken into consideration is her age, for Arolia De Kol is 12 years old, an age at which most cows have passed the period of their greatest milk production. The second feature is the fact that Arolia De Kol dropped two calves within the eleven months preceding the beginning of the official test, and had been almost constantly in milk for that period. The third feature is that Arolia De Kol did not attain a world's record production for any period under one year, thereby stamping her performance as that of a consistent, all-the-time producer. To bear this out the figures of the official test show that during the last seven days of the year she produced 514.2 pounds of milk and 17.12 pounds of butter-fat. At the present writing, after having been in milk for thirteen months, she is producing better than 65 pounds of milk daily.

Another big producer in this herd, Riverside Sadie De Kol Burke, who holds the seven-day world's record for milk production, is on official test for one year and has finished the first six months with the enormous production of 18,275 pounds of milk. This exceeds the first six months' production of Arolia De Kol by a very wide margin, and if she shows anything of the consistency of the older

cow, the Morris herd will have another world's record at the end of her year. After having yielded that great volume of milk for six months, Riverside Sadie De Kol Burke appears in the pink of condition, sleek of coat, bright of eye and with a skin which handles like kid.

Arolia De Kol of Riverside, a 4-year-old daughter of Arolia De Kol, has completed a year's test during which she produced 555 pounds of butter-fat. She has just freshened again after a short rest, and during the past sev-

side De Kol Burke, and full classes of all ages.

The writer had the pleasure of looking over most of the individuals in the herd to be shown, and among them has selected for mention in this article a number which particularly appealed to him. A noticeable fact in the whole show herd is the consistent development which has taken place in all the individuals under the painstaking regime at the Morris establishment.

The bull, King Segis Pontiac Em-

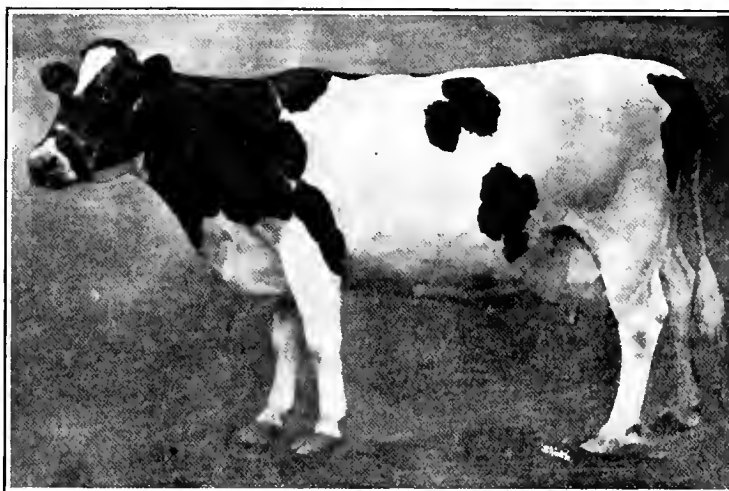
Korndyke (81497), is a beautifully put up animal of mostly white color, and is among the very top-notchers in the herd.

In the whole Morris herd it is probable that there are not more inches of real bull in proportion to the space he occupies than is found in Segis Pontiac De Kol Burke (97472), the 6-months-old son of Sadie De Kol Burke, and whose sire is King Segis Pontiac Emperor. The last time the writer saw this handsome little chap he was just learning to walk, and looking out upon the strange, unfamiliar world with wondering eyes. Today I find him a well-developed, self-confident youngster, who is fulfilling well the expectations of his aristocratic parentage, and—well just watch the Holstein-Friesian Junior bull calf class at the State Fair.

Among the females in the herd, outside of the big producers already mentioned, I noticed particularly the senior yearling heifer Arolia De Kol 3d (164130), a grand-daughter of Arolia De Kol, a promising individual of rich breeding. The 2-year-old De Kol of Valley Mead 3d is in the pink of condition, and recently produced over 19 pounds of butter in seven days. There was also noted four good daughters of Lady Bergsma Butter Boy. These will be shown at the State Fair.

There are so many good calves in the Morris herd that it would be difficult to pick out any number as being better than the others, and besides the boys who care for the Morris herd have a keen rivalry on hand as to which is going to have the honor of having fitted the winners among the youngsters, so discretion suggests that I let the calf question alone.

There is one good piece of news, however, which will interest many of our readers, and that is the fact that some time this fall there will be some young females for sale from the Morris herd as the herd now has a sufficient number of large producers to warrant them in offering a limited number of heifer calves, a thing which they have not done up to the present time.



ARALIA DE KOL.
Holder of World's Record for Milk Production in One Year. Owned by
A. W. Morris & Sons, Woodland, Cal.

en days (preceding August 20th) produced 22 pounds of butter and is gaining.

De Kol of Valley Mead 2d, a 3-year-old, has completed a seven-day test, during which she produced nearly 21 pounds of butter, and she is still gaining.

The Morris show herd at the California State Fair this year will number about forty head, among which will be Arolia De Kol and possibly River-

peror (72287), who will show as a 2-year-old, has developed into a magnificent specimen. We saw him while he was on the exercise wire, where his chief enjoyment is to play tag with anyone who will make the pace for him from one end of the long wire to the other. He is as good natured and playful as a kitten about it, and at the end of one race almost asks for another.

The senior yearling bull Lorena

Big Horse and Live Stock Shows

Horse Racing and Free Attractions

California State Fair

SACRAMENTO

SEPTEMBER 14-21 INCLUSIVE

\$20,000 In Premiums

\$30,000 in Purses and Stakes

PLANS FOR BIG LIVE STOCK EXHIBIT IN 1915

The Live Stock and Dairy Journal—

The live stock department of the exposition at San Francisco in 1915 will not be its least attractive feature if the plans that have been laid out by the officials connected therewith can be carried into effect.

It is necessary in this connection to interest breeders and exhibitors, not only in this country, but all over the world. The exposition will be universal in character, and the live stock department should be equally as comprehensive. To that end we are in correspondence with the purebred record associations of the United States and Europe, as well as the live stock associations of other countries, and with the agricultural press throughout the world. American Consuls in every country where live stock is a factor have been asked to inform this department of individuals, societies and organizations that might be of assistance, and when it is considered that not only here but abroad there are individuals and organizations representing horses, cattle, sheep, swine, goats, poultry, pet stock, dogs and cats, some idea can be obtained of the volume of correspondence that must ensue.

This department is particularly fortunate in having the services of Colonel Charles F. Mills of Springfield, Ill., as Chairman of the Advisory Committee. Colonel Mills has spent practically all of his time for nearly half a century in promoting the interest of the live stock resources of this and other countries. No other man has held so many positions that reflect to the good of the live stock industry, and his experience as Secretary of the Live Stock Department of the Columbian Exposition, and as Chief of the Live Stock Department at the St. Louis World's Fair peculiarly fits him for Chairman of the Advisory Committee. Acting with him will be the Presidents of a majority of the purebred record associations of the United States. The naming of the Secretaries of many of the pedigree record associations as superintendents of their respective breeds at San Francisco in 1915, acting as the direct representatives of their associations, will inspire confidence and insure a greater participation than any other plan.

It is confidently expected that there will be more prize winners sold at San Francisco than at any fair that has gone before. Many Pacific Coast breeders have said that they will supply their needs at that time, and that no good specimen will be allowed to return to its point of origin unless its owner has an exalted idea of value. Hawaii, the Philippines, China and Japan will be heavy buyers in some of the divisions, and South America and Central America will bulk largely as purchasers in all of the divisions.

When it is considered that live stock on the farms in the United States approximates in value five billions of dollars, and that the farmers constitute the greatest potential part of the visitors to the exposition, it is easy to grasp the idea that the live stock department is not the least important part of the great exposition that will be given on the shores of San Francisco Bay in 1915. It is the intention and ambition of this department to collect a display that will be worthy of the industry it represents, and one that will be worthy of the exposition.

D. O. LIVELY,

Superintendent of the Department of Live Stock.

The farmer has not yet discovered a more efficient fertilizer and humus for the soil than animal manure.

A Coming Purebred Ranch in the Sacramento Valley

The J. S. Gibson Co. at Williams, Cal., are making extensive improvements on their 1800-acre ranch just outside of Williams, all tending toward the enlargement of the purebred herds of Holstein-Friesian cattle and Berkshire swine already on the place.

In the old days Mr. Gibson bred and raised some of the noted thoroughbreds of the turf world, and ranged herds of beef cattle. There are still some remnants of the old stock on the place, but the ranch is now being developed to suit the needs of dairy cattle and swine. There are now on the place a grade dairy, 28 head of registered Holstein-Friesian cows, a number of purebred bulls and heifers, a herd of registered Berkshire swine, a herd of stock hogs, some thoroughbred mares, a number of grade draft mares and a few mules.

The farm buildings, numbering upwards of thirty, are almost a little village. Formerly the ranch had a big mule barn, as mules were used extensively on working the land until they were recently replaced by a caterpillar engine. The mule barn has now been partially converted into a milking barn with concrete floor of ingenious construction, and stanchions for 46 cows. Water is piped into the barn for use on flushing the floor, drainage being effected into a big concrete cesspool. As soon as the irrigating ditches are completed a pump will be hitched to the cesspool and the liquid pumped directly into the ditches.

There are about 300 acres of the ranch planted to alfalfa, which has been raised without irrigation, and has averaged from three and a half to four tons per acre. The third crop has been used for seed. Three wells have just been put down on the place, and are ready to be hitched to the pump. When the water is turned on the land it will easily produce from four to six cuttings of alfalfa, and an additional acreage will be planted. There is also some sorghum raised, and shows a fine stand without water.

A well equipped separator house has recently been built, the cream from the milk being sold in Williams and the skim milk is pumped 500 feet to the swine houses.

The Holstein herd contains some promising individuals among the cows, a number of them showing by private record a production which will later admit them to the A. R. O. circle. The junior herd bull, Prince Alcartra Korndyke, is a good individual, well marked and of excellent type. His ancestors are abundantly represented in the A. R. O., his sire, Korndyke Queen De Kol's Prince, being the sire of four daughters that average 30.22 pounds of butter-fat, and his sire, Lorraine Prince, sired over 50 A. R. O. daughters, and his sire, Manor De Kol, is the sire of 33 A. R. O. daughters and 20 sons with 225 A. R. O. daughters. His dam, Tillie Alcartra, at the age of 2 years and 6 months, produced 490.4 pounds of milk and 17.38 pounds of butter-fat in seven days, and she is descended from a line of A. R. O. ancestors. There are also a number of young bulls of good breeding and individually of good type.

The little black-and-whites have a stable of their own, with stanchions just like the grown ups. Here they are fed in shallow gallon pans so set into openings in the manger that they can not be overturned. Additions will be made to the purebred Holstein herd, and it is planned to grade up the dairy herd until it is made up of high-grade Holsteins.

The head of the purebred Berkshire herd is the registered boar Governor Johnson, a typey Berkshire of great length and good depth bred by Charles

Goodman. This boar would give a good account of himself in the show ring should he be shown.

The active management of the big ranch falls largely upon the shoulders of Mr. Gion Gibson and his sister, Miss California Gibson, both of whom were raised in the spirit of the thoroughbred, and who have now turned to the purebreds of their choice as the animals best suited to present day conditions. Mr. Gibson is a graduate of the University of California, and among his other accomplishments is a very clever mechanic, having on the ranch one of the finest equipped machine shops in Northern California. He is making elaborate plans for the improvement of his Holsteins, the irrigating system being the first step, and this herd will be heard from later.

Miss California Gibson is a thorough purebred enthusiast and is a big factor in the management of the ranch. Much of the outside work is capably handled by her, and the fact that she covered some twenty thousand miles in her forty-horsepower roadster last year is evidence that she was anything but idle. We hope to visit the Gibson ranch again after the alfalfa fields have had their water, and at that time we shall be able to show some interesting photographs, both of fields and purebreds.

IMPROVEMENTS AT AGRICULTURAL PARK.

The next Legislature will likely be asked to come to the rescue of the California State Fair, which is outgrowing the buildings completed only a few years ago at Agricultural Park on the outskirts of this city. Each year the Fair is growing in popularity until it has been found that the buildings, which a couple of years ago were considered adequate, are not nearly large enough. This year will find the grounds well covered with circus tents in which exhibits that could not be taken care of in the permanent buildings will be shown.

There are twenty-four counties coming in with exhibits for the September Fair, and these will endeavor to find room in the main pavilion, which is 250 by 100 feet. An auxiliary pavilion with wooden floor and sides, but with a canvas top, will be added to the big building, thereby giving an additional space of 120 by 100 feet. Any more counties that want to come in will find trouble getting accommodations.

Machinery hall, which is 170 by 64 feet, has an adjoining shed of 132 by 42 feet, but even this is not large enough for the machinery exhibits which usually have to take up part of the open area. Manufacturers' building is crowded to capacity with its 180 by 84 dimensions. More exhibitors would like to get in.

When the Fair buildings were laid out four years ago the automobile industry was not taken into consideration, so no particular place was provided for this line of display. Each year the Fair Directors have to put the machines in tents, and this September will find the largest tent obtainable taking care of the automobile show. Dealers and buyers are beginning to recognize the State Fair as an annual auto show as well as agricultural and industrial show place.

The stock barns are inadequate in size. The horse show this year will be held in a big circus tent, and the vehicle displays will have to go under canvas.

Good seed, good cultivation, good common sense are a pretty good combination if good crops are desired.

IMPERIAL VALLEY STOCKMEN ORGANIZE.

The Live Stock and Dairy Journal—

In response to a call issued by Mr. Ed. R. Gorman of Holtville, Cal., some thirty or forty stockmen met in Imperial, Cal., for the purpose of forming a stockmen's association. Two weeks later, at a meeting held in Imperial, Cal., this association was formed, a set of by-laws adopted and a board of five Directors elected. The Directors named are D. N. Morgan, Imperial; W. H. Moorehouse, Heber; J. C. Fortnier, Brawley; Ed. R. Gorman, Holtville; C. S. Thompson, Calico. These are all capable and aggressive men, who no doubt will carry on an efficient and profitable work.

This movement grew out of a sense of need for united effort in combating the spread of hog cholera, which has visited some parts of Imperial Valley in the past few months, and in the beginning was an attempt to place the hog raising industry on a solid foundation by making the herds immune to cholera by the Dorset Niles method of vaccination, as it has been developed by our experiment stations.

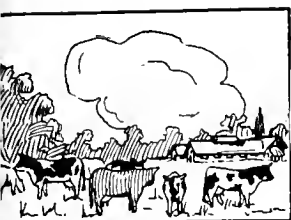
The promoters of this movement quickly realized their work was larger than the hog industry, and broadened their plans to include the needs of all stockmen of the valley. While nothing definite can be said on the matter, it seems likely that the movement will meet with the substantial support and co-operation of the County Board of Supervisors. Dr. Mitchell of the State Experiment Station was present at the meeting at Imperial and expressed a live interest and willingness to cooperate in the solution of our stock problems. The work is to be carried on by a salaried Secretary and a competent veterinarian.

If all the problems demanding attention, among which are an honest and efficient application of the tuberculin test to our dairy herds, milk testing of herds, control of summer sores and itch on horses, proper enforcement of inspection laws, the control of hog cholera, or rather providing protection against hog cholera, is the most important. The aim is not merely to stop periodical outbreaks, but by the use of the Dorset Niles anti-cholera serum simultaneous method, systematically applied, to immunize our herds and protect them against outbreaks of hog cholera. The success of this method has been demonstrated in various portions of the East, and very marked results have been obtained in herds near Los Angeles by Dr. F. G. Matthews. This is a large and very important undertaking, for to insure the hog industry against periodic outbreaks of cholera will give that industry a tremendous stimulus. This is not too much to hope, because of the isolated nature of the valley, and because the value of the Dorset Niles treatment has been demonstrated here to some extent.

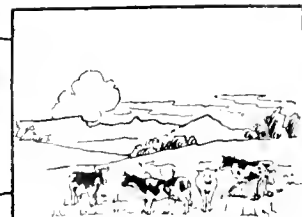
S. E. ROBINSON.

Over \$20,000 in cash besides a host of blue ribbons and diplomas will be distributed in prizes to winners at the various events in connection with the Santa Clara County Fair, to be held September 5th to the 15th, according to the announcements being distributed. This is divided among the horse and automobile races, the industrial exposition, the auto show, the pure food show, the agricultural and the stock exhibitions.

The quarantine established May 14th by Governor Oddie of Nevada against the driving of cattle from California into Nevada was withdrawn July 1st.



THE DAIRY



The Silo for the Dairy Farmer

It Saves the Succulence and Milk-Making Qualities

(Written for *The Live Stock and Dairy Journal* by E. H. Hagemann, University Farm, Davis, Cal.)

That the more and general use of the silo in California would be a long step forward, helping the dairy farmer in a dozen different ways, there can be no question. The greatest one item is the preservation of cheap succulent feed for a time when cost of milk production is highest. There are always from two to four months during the year when feed is scarce and cows are allowed to go hungry, or are fed in feed at prices so high that it always very little, if any, profit for the dairyman.

Creamery patrons have complained to the writer when alfalfa hay climbed in price to from \$10 to \$14 per ton, that it was too high to feed to dairy cows, and more profitable to sell the hay. That, of course, is only business and right thinking, but it is not business not to have a silo and have an abundance of cheaper and better milk-producing feed stored during a certain time of year when such is plentiful, and also be prepared to sell some high priced hay later on, should such price warrant an advantage over feeding it to the dairy cow. A good dairy cow is sure to make the highest returns for feed. Especially is this so when silage can be fed during the time of year when succulent feed is not to be had and cows are allowed to drop off in their milk flow.

The average production of butter per cow in California is 140-150 pounds a year. This should not be construed as meaning that it is due to the quality of the dairy stock altogether, but the above production could be nearly doubled by more and better feeding. Hence, the use of the silo in lessening the price of feed and increasing the profits of the dairy farmer.

The Silo Not a Failure Nor Unnecessary in California.

Years ago in the East the silo had a hard struggle to exist, and was considered a failure by a great many, due to losses from spoiled silage through inexperience of building and putting up the silage. Today thousands of silos are to be found on dairy farms in the East and Middle West, and are considered a necessity. In California failure may be attributed to the same reasons.

It may also be said that the reason a more general use of the silo is not made in this State is that we do not or can not grow the corn crop necessary for successful silage, which material is used principally or all together in the East. While corn can be grown for silage in all the valleys and a great many parts of the State by irrigation, alfalfa is perhaps our greatest producing plant for the silo, and quite a number of dairy farmers in this State have been successful with alfalfa silage, among whom may be mentioned Mrs. M. E. Sherman of Fresno and Henry Timm of Dixon.

There are several months during the year when frost in the valleys keep back the alfalfa very short, or occasionally water for irrigation is not plentiful, and it is then that silage comes handy as a supplement to save

the milk flow.

Root cellars and root crops in Denmark take the place of silos and silage in this country to a great extent. Root crops hold the juices and succulence, which is both conducive to milk production and good health of the dairy animal, and it shows that the Dane knows what he is doing when it comes to dairying.

The proper preservation of silage requires the utmost care, especially in a dry, hot climate, and it cannot be put up in a careless way. A silo should be built with not too large a diameter and deep enough to give plenty of pressure to pack the silage

Breeding Associations for Dairymen

A Plan of Co-Operation That Should Find Favor in California Dairy Communities

In the official bulletin of the Tulare County Co-Operative Creameries, Professor Leroy Anderson makes some valuable suggestions regarding breeders' associations, as follows:

"It is gratifying to note the increased interest that is being taken in dairy cattle improvement. Breeders of registered cattle have paved the way—they have been the 'bell-weather' as it were, who have gone ahead and shown every dairyman how to have better cows. By their official testing they have found the cows producing the most butter, and by careful selec-

tion can be formed. This particular form of organization containing 120 cows is divided into three groups of forty cows to each group. There may be from two or three to seven or eight men in each group, depending on the size of the herds. Or there may be more groups in the associations, depending on the willingness of the people in the community to join.

"Each member joining an association is required to sign an agreement like this:

"We, the undersigned, desiring to organize a bull association, do hereby promise to pay equal sums of money on or before—, for which we agree to take equal shares of stock in aforesaid association when organized. This association is organized for the purchase of three or more registered bulls, provided the groups of forty cows each can be secured. The understanding is that these bulls are to be owned in common and changed from group to group every two years, thus providing service for six years.

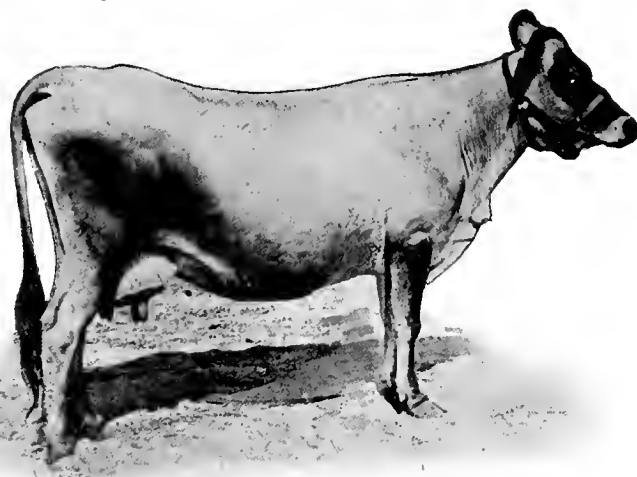
"Breeders' associations, whether for purebred stock or for grading up common stock, mean the co-operation of dairymen to help each other in improving the milk cow. Without such co-operation the improvement is slow and ever will be slower than it should be or have any reason to be. Dairymen, let's get together all along the line."

FIRST ANNUAL SALE OF PENNANT DAIRY HOLSTEINS.

The first annual sale of Pennant Dairy Holsteins will be held on the State Fair grounds at Sacramento, Cal., on September 21, 1912. This sale will provide breeders and dairymen with another opportunity to secure some more of the fine stock which Heenan & Weldon have been distributing, and the quality of the stock offered indicates that this sale will be the means of still further spreading the good reputation of Pennant Dairy herd. This stock is the personal selection of Dr. Weldon, and his personal selections in the past have found great favor, especially among breeders wishing foundation herds.

Note that the cows and heifers in this lot are all of A. R. O. breeding, and that they are bred to Pontiac Korndyke and King Segis. This stock will be welcomed to the coast by every lover of the purebred Holstein, and the infusion of the great producing blood of this fine lot will have as great an effect upon the upbuilding of Holstein herds here as any importation of cattle ever brought to the coast. Come to this sale and make Saturday, September 21, 1912, a day to be remembered by Holstein breeders.

In order to produce desirable flavor it is very essential that the milk and cream be handled under sanitary conditions.



JERSEY COW, MARGERY GOLDEN (183950).

Has Official Record of 10,718 Pounds Milk and 540 Pounds Butter in One Year. Owned by Guy H. Miller, Modesto, Cal.

hard. When filling the silo the silage should be well tramped and packed around the outside near the walls. Throwing the silage toward the edges and packing this part of the silo, letting the center take care of itself, will avoid open spaces for air, which is one main cause for the spoiling of silage. The silage must be well sealed over the top after filling, with chaff and straw several feet, well soaked with water to keep out the air until ready for use. On the above, to a great extent, depends the keeping quality or per cent of loss.

Silage Does Not Injure the Flavor of Milk.

Good silage, judiciously fed, does not injure the flavor of milk, but if decayed and mouldy silage is fed a few hours before milking the milk will probably be tainted. Silage, having gone through a stage or process of fermentation, is necessarily a high-flavored food, and it is reasonable that it must not be fed indiscriminately, and that the milk must be cooled and have proper care immediately after milking.

The Borden Condensed Milk Company refused to accept milk from silage-fed cows for some time, but when proper feeding of silage and care of milk could be enforced they relinquished this restriction.

tion of the best cows for breeding have generally increased the yield from generation to generation. Nowadays a purchaser of registered dairy cattle asks immediately, What is the cow's official record, and what is the record of her dam and grand-dams?

"These 'bell-weather' have convinced us that testing cows for their butter yield is a business that can be profitably applied to grade cows as well as to purebreds. They have also shown that careful attention must be paid to the sire. So we now have associations of dairymen especially for the purpose of more conveniently and cheaply testing the cows of a community for butter-fat. In a previous number Mr. Mitchell described such cow testing associations. In Michigan and Wisconsin some communities have organized for the purpose of more conveniently and cheaply providing themselves with purebred bulls. In Michigan these associations are among dairymen having common or grade cows which they wish to improve by better breeding. The name of the organization is the 'Co-Operative Bull Association,' and the plan is as follows:

"When the owners of 120 or so common cows decide upon some particular breed from which to select males for improvement, then an association

Registered Holstein Bull Calves

From \$60 up. Among them two great-grandsons of Colantha 4th's Johanna and Aagie Cornucopia Pauline, who averaged 35 lbs. butter in seven days.
L. A. HALL & BRO.,
Box 39A, Alviso Road, San Jose, Cal.

McAllister & Son

Breeders of

Purebred Holstein-Friesians

Chino, California

BULL CALVES FOR SALE

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CONSULTING
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914 Mutual Savings Bank
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Concrete Silos, Sanitary
Dairies, Creameries, Re-
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J. H. HARLAN CO.

WOODLAND, CAL.

HOLSTEINS

Nothing to sell now, but we are
booking orders for calves for future
delivery.

Offerings all Sold

REGISTERED HOLSTEINS.

Orders taken for bull calves to be
born of A. R. O. dams. Heavy milk-
ing strains with high average per cent
fat.

LINWOOD FARM,
Santa Cruz, Cal.

Purebred Registered
HOLSTEIN CATTLE
The Greatest Dairy Breed
Send for FREE Illustrated Booklet
Holstein-Friesian Assn., Box 165, Brattleboro, Vt

Holstein-Friesian Cattle

A Few Choice Registered Bulls and
25 Choice Registered Heifers.

Prices on Application.

CHAS. JAY WELCH, Los Banos, Cal.

FOR SALE

High Grade Holsteins
Cows, Heifers, Bulls
Carlots or Less

A. L. SAYRE, Madera, Cal.

SHORTHORNS MILK STRAIN

Attention Dairymen!

I am breeding the finest stock in the
West. Write for prices and pedigrees.

JOHN LYNCH Petaluma, California

R. R. Cartwright

BREEDER OF

Red Polled Cattle

ANGELS CAMP CALIFORNIA

Should Dairymen Not Take More Interest in Agricultural Fairs

(Written for The Live Stock and Dairy Journal by T. J. Gilkerson.)

What is the matter with our State and county fairs? What criticism have you to offer? The chief trouble in my estimation is the lack of attendance on the part of those who should be most vitally interested. Can't you afford to get away from your farm for one or two days each season and see what of benefit you can derive from this source? Many farmers and dairymen, instead of giving their fair a boost by helping in some little way, will be so quick to offer criticism, and although they perhaps do not mean to do the cause any harm, they will unconsciously do much harm.

There has in the past been much criticism among progressive farmers of the character of the fair. They say there is too little real agricultural fair and too much sideshow and cheap attraction. This has, no doubt, been so of the California fairs in general, and the criticism should be well taken, but how can the trouble be rectified? Simply by creating a greater demand

my mind there is no education more available to all classes of farmers than this. It is the one place where we can see the different breeders with their productions and see them compared by experts.

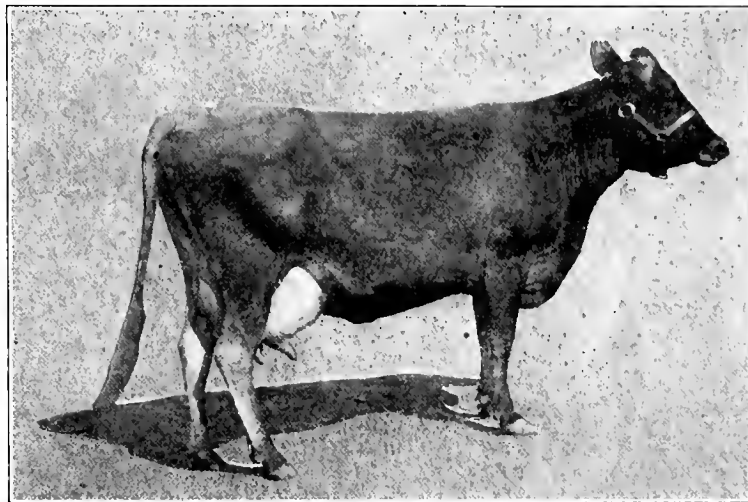
The intelligent dairyman will, of course, soon learn that the cow or bull that carries off the blue ribbon or gold medal is not necessarily the best animal, and if he follows up the fairs he will soon find that very competent judges often differ as to the placing of the animals, and that the same judge will sometimes reverse his decisions at succeeding fairs, and unless a man is inclined to look into the matter thoroughly and hash it out he is liable to set it down that the judge is no good or else that no judge can tell much about an animal in this manner. However, it has been quite well proven that although there are many exceptions to the rule, the show ring type of animal is generally a good producer and a good breeder. In fact, this is the basis upon which the scale of points used in the show ring was got-

tion Jersey cow of the State Fair last year, and has recently proven herself a great producer by winning one of the medals offered by the American Jersey Cattle Club.

It is rather interesting to me some times to hear different people tell how they know a good cow when they see one. Some of these ideas have evidently been handed down for many generations, and you usually find that there is some good logic in all of them, and that the modern score card is simply an assembling and balancing up of these numerous points which were recognized by our forefathers as indications of the producing qualities of a cow. Some dairymen have some ideas of their own as to what are the essential characteristics in a good cow, but there are others who have no ideas whatever, and never seem to be able to connect dairy form with the work which the cow has to perform. Many fine herds have been built up by breeders, who have for years bred for type alone, they considering that type and production were so closely related that if they got type they would be sure to have the production, and although this kind of breeding is hardly to be recommended, yet these men have usually hit the mark pretty well.

Aside from all of the pleasures and intellectual advantages of attending a fair we can really get many ideas that will result in financial gain to us. The lesson gained by an attentive observer in the placing of the cows and heifers alone should be worth considerable to the average dairyman who is frequently buying and selling cattle. Any dairyman, as well as breeder of dairy cattle, cannot get the general type of a good animal stamped too impressively on his mind. If you have had more advantages than the average dairyman and have had some lessons along this line, then you, too, should go to the fair and observe very closely in order to brighten up a little and see if there isn't something about the work that you haven't thoroughly understood before, and if you wish to ask the judge to explain any point to you that you are hazy about. Right here I want to say that this idea of the fair employing one judge to judge so many different classes of live stock is a great mistake. In the first place no man can be an expert along so many lines, and besides if he was he could not do justice by so much work. The judge at the State Fair last year said before he was half through that he felt like he had been tossed on a blanket, and he looked like he was about worked out.

In order to give you an example, which will prove to some extent the value of the knowledge gained by observing very closely the judging in the show ring, I am inserting a little picture of a grade cow, together with her 2-year-old daughter. I purchased this cow as a heifer several years ago. At the time she was in a herd of about ninety head, and as I was picking up a herd of grade cattle and took a liking to her appearance I tried to buy her. The owner did not care to sell her so set a very high price on her, but that did not bother me in the least as I considered the heifer worth the price. I purchased her and, for some time, was laughed at considerably on account of paying such a high price for a heifer, but today I take pleasure in showing her as a profitable investment. She has proven herself a great producer, and has had five daughters that are proving even more productive than she is. There have been several similar instances in my experience, especially at auctions, where a little knowledge of what the essential points in a dairy animal are has helped me much in the purchasing of animals as it will also others. Therefore, I should say that although it is hard to leave your farm, yet you should make a great effort



LORNA OF VENADERA.
Champion Jersey Cow. Owned by Guy H. Miller, Modesto, Cal.

for the strictly agricultural fair. The management of the fair, like the management of other undertakings, find that the almighty dollar is very necessary in order to maintain the fair year after year, and they are compelled to do the things that bring in the most money. However, if the agricultural public in general would support the fairs better in the way of interest and attendance as well as in the exhibiting line they would help it materially to be more what is desired in a fair.

California dairymen seem to be especially backward about showing the proper interest in such affairs. They do not seem to be able to see that they can gain anything by taking an interest in a fair. They feel that it would be a waste of time and money for them to exhibit or attend these fairs. They can't figure that a few days spent at a fair can result in any financial gain, and, therefore, they will not go. This is where they are penny wise and pound foolish. Of course, we can't all go to the fair and pick up a bunch of greenbacks, but we can all pick up enough information and experience to repay us well for the time spent. The fair represents a golden opportunity for the breeders of live stock to get together, and the ideas gained by such intercourse can not help but be of value to us all. Of course, it may not result in immediate financial gain, but in the course of time it will undoubtedly do so. To

ten up, and as fast as it come to being generally known that any part of this scale is wrong it will be taken up by the different breeders' associations, and will eventually be changed. Just now they are learning not to discriminate against the sloping rump, as it has become generally known that the animals with sloping rumps have proven to be just as great, if not greater, producers than those with the straight back which carries well out to the tail-head. A striking example of a show animal which proved that the show ring type of animal is not far off from the proper type was the Holstein-Friesian bull, King Segis, who, before his death, proved himself one of the greatest, if not the greatest, sire the world has ever known. Then in the Jersey breed we have a good example close at home in the cow, Lorna of Venadera, who was the cham-



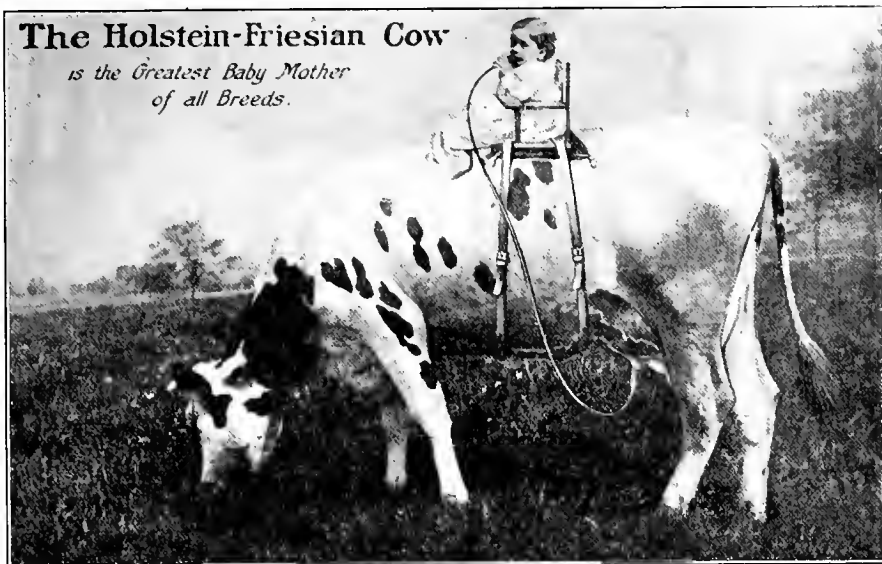
Two Dairy Cows Selected Largely
Because of Conformation to Show
Ring Requirements of Type.

50 HEAD OF REGISTERED HOLSTEINS 50

TO BE SOLD TO THE HIGHEST BIDDER

The Holstein-Friesian Cow

*is the Greatest Baby Mother
of all Breeds.*



First Annual Sale of The Pennant Dairy HEENAN & WELDON

Sale will be held on the State Fair Grounds, Sacramento, September 21, 1912. We will sell about 45 head of A. R. O. Cows and Heifers of Advanced A. R. O. breeding. Bred to sons of Pontiac Korn-dyke and King Segis, the two greatest bulls of the Holstein-Friesian breed.

Will also sell 5 or 10 Young Bulls, all from tested dams and sired by high-class bulls.

Every animal will be tuberculin tested before the sale.

Buyers will be furnished with registration and transfer papers, and all animals will be loaded on board the cars free of charge. Every animal offered will be sold without reserve to the highest bidder. Catalogues will be furnished at the sale.

HEENAN & WELDON,
Box 364, Sacramento, Cal.

to attend the fairs, absorbing from them all that you can and taking the knowledge home and putting it into practical use where it will prove a gain to you both intellectually and financially.

MILLER'S SUPERIOR JERSEYS.

The Guy H. Miller herd of Jerseys at Modesto, Cal., was recently visited by a Journal representative. Mr. Miller had just received word from the Secretary of the American Jersey Cattle Club that his cow, Lorna of Venadera, had won a silver medal for second in aged cow class for production for the year 1911. This is the first time this medal has traveled west of the Mississippi, and is a great honor for the California Jersey.

A most excellent cow was observed in this herd in Margery Golden (183950), whose official test is 10,718 pounds of milk and 540 pounds of butter in one year. Her sire was Golden of Baltimore, and her dam Ruth of Venadera.

Mr. Miller will show in all classes at the State Fair, except aged bulls and breeders' young herd. He will compete in all butter-fat tests and for all the special prizes offered by the American Jersey Cattle Club, except in aged bull class. He will show for the first time his splendid Jersey bull, Altama Interest, now 2 years old, brought out from the East last year, but too late to show as a yearling. This sire will be a hard one to beat.

Mr. Miller recently made sales of purebred Jerseys to L. L. Eaton and C. E. Shattuck of Los Angeles County, and to Bedell Stock Farm, Dos Palos.

The Miller farm contains 48 acres. Mr. Miller is building a handsome new home. It is Mission style, and when completed will be one of the finest rural homes in Stanislaus County.

The State has bought from H. E. Vogel fourteen choice Holstein heifers for the Soldiers' Home at Yountville. They were tested first by a representative of the State Veterinarian, and were found to be free from tuberculosis.

SALT TO COWS.

Some experiments conducted by Professor Babcock—the inventor of the milk tester—in Wisconsin regarding the giving and withholding of salt to cows, are of interest to dairy farmers. He found that if salt were absolutely withheld the effect would be seen with some cows in from two or three weeks, but some individuals went on for the most part of a year without any evil effects; but sooner or later the animal developed a state of low vitality, ending in a sudden and complete breakdown, though recovery would be rapid when salt was again given. The effect was worst shown at calving time, or immediately after. In general, cows giving the largest amount of milk were the first to show signs of distress, while there was less trouble when the animals were on the pasture than when in the cow shed. Dry cows suffered very little, and the same applies to bullocks and stock cattle—the salt naturally in the food, or in the "earthlicks" of animals out in the fields being nearly sufficient for them. In an ordinary daily ration there is about three-quarters of an ounce of salt, and this is nearly, but not quite, sufficient for dry stock per head, but not enough for the milk cow. The milk drains away a lot of salt out of the system, and an additional ounce per head daily must be added to the food of a cow indoors. Many years ago the French government carried out some experiments to test the amount of salt required by the different kinds of farm stock, and reckoned a milk cow required a total of two ounces daily, and this corresponds with Babcock's figure, allowing for differences in the size of different breeds. It is, therefore, safe to say that a milk cow requires about an ounce of salt daily when in milk, besides what she gets in her food. When out of doors the best way is to let her have access to rock salt to lick, but indoors it must be given in the food in the ordinary granular form.

OCTOBER 3, 4 and 5 at MODESTO

Stanislaus County Agricultural, Live Stock and Dairy Exposition In conjunction with a big Poultry Show. The "One Big Fair"

Send in your entries. Write now for Premium Book and Entry Blanks. Competition open to the world in all departments. Plenty of floor space. Reserve your space for horticultural, agricultural and machinery exhibits.

W. K. BASSETT,
Secretary Stanislaus County Agricultural, Live Stock and Dairy Exposition,
MODESTO, CALIFORNIA.



HOLSTEINS

Purebred, Registered Bull Calves, sired by Aeme Pontiae and Salambo Captain Riverside, and out of my Best Cows. Pedigrees and Prieses on application.

J. W. BENOIT, R. 2, Modesto, Cal.



BREEDERS AND DAIRYMEN!

JERSEYS

I have the best blooded stock in this country. If you wish heifers and bull calves, I am in position to supply you. Purebreds only.

GERALD O. HILLIER,
Modesto, California.

2 Carloads of Good, Young Dairy Cows

For sale, which have all passed the tuberculin test. For information apply to

A. BALFOUR

350 CALIFORNIA STREET, SAN FRANCISCO.

DAIRYMEN ATTENTION!

We can supply you with

Ayrshires

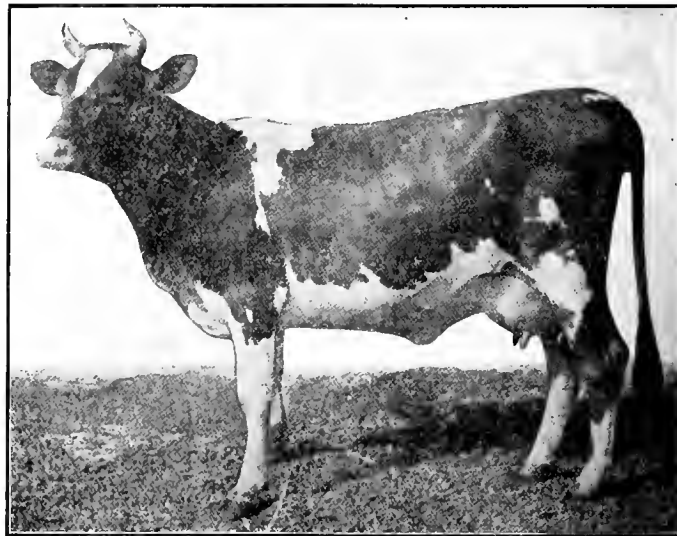
Best blood in the West. Bulls, cows, heifers and calves. Our service bulls were sired by Grand Champions. Write for pedigrees and prices.

BROWN & BRANDON,
Petaluma, California.

**FOR SALE! IDYL FERN'S COMBINATION FERN**

(103558)
A 2-year-old son of Golden Fern of Rockland, the highest priced Jersey bull ever in California. He is a show bull and a breeder. Solid color. Dam, Idyl Fern Beauty (269753), whose grandmother is a full sister to Gertie's Son, and her mother produced 991 pounds of butter in one year.

Price, \$150 delivered f. o. b. San Francisco. Satisfaction guaranteed.

IDYL FERN DAIRY
FORTUNA, CALIFORNIA

MAUD T. OF EDGEWATER.

An Excellent Senior Yearling Guernsey Heifer. Owned by Charles G. Lathrop, Stanford University, Cal.

GUERNSEYS AT ALTA VISTA.

One of the star attractions at the California State Fair this year will be the Alta Vista Guernsey herd, owned by Charles G. Lathrop at Stanford University, Cal.

The writer recently had the pleasure of seeing this herd of beauties at their home just back of Stanford University. While it is not possible to do the herd justice in a short descriptive article, we will select some of the individuals for especial mention.

To begin with, Alta Vista will be represented at the fairs by a complete double herd. The individual excellence of the animals shown would be a credit to the breed in any show ring, and in our report of the blue ribbon winners and champions at the fairs we shall no doubt be called upon to repeat the names of many mentioned in this article.

We saw first at Alta Vista the calf herd. Among the bulls the senior calf Violet's Pride of Iowa stands out as a most promising sire. He is a very typey youngster and is a grandson of Dairymaid of Pinehurst, the remarkable cow who made 910 pounds of butter-fat last year. There are also in the herd of senior bull calves two fine youngsters sired by the great Alta Vista herd bull, Lord Kitchener.

Among the heifer calves the eye is immediately attracted by the beautifully marked Kitchener's Flora. She looks like a real little cow, and should develop into one of the stars of the herd.

Kitchener's Dainty Lass, a junior

yearling, will soon drop her first calf, and gives promise of developing into a good producer.

Lord Kitchener, Raymond of Alta Vista, Flora's President, Kitchener's Corona Boy, Kitchener's Duke and Gistana's Mysie make up as fine a string of bulls as the most exacting Guernsey fancier could desire. Kitchener's Corona Boy was grand champion at the 1911 Oregon State Fair, and is in fine form this year.

Among the females the 4-year-old Imp. Gold Pail 2d will be hard to beat in her class, and the 3-year-old Conqueror's Primrose is shaping up to excellent form. At the Oregon State Fair last year Professor Hugh Van Pelt pronounced her to be one of the best Guernsey heifers he had ever seen in a show ring.

We believe that the real sensation in the herd of females is the senior yearling heifer, Maud T. of Edgewater, sired by Imp. Raynold, dam Maud of Edgewater. A photographic reproduction of this remarkably fine heifer appears in this issue of the Journal, and while it is a good likeness of her, yet she must be seen in order to get the full effect of her beauties of form and color, and the features which mark her as a coming big producer. She has a little heifer calf so like herself that the writer had no difficulty in picking her out of a bunch of half a dozen. Maud T. of Edgewater will not be 2 years old until October 19th of this year, and if she keeps on developing as she has up to her present age she has all the indications of becoming one of the great

WE LEAD IN JERSEYS

Ten purebred and registered Jersey Heifers, ten purebred and registered Jersey Bulls, all strong, robust fellows, for sale. They are sons and daughters of our best milk producers, and sired by our famous herd bull. Largest herd of registered Jersey cattle in California. Write for prices and pedigrees. Also have purebred Jersey cows for sale.

Rancho Dos Rios, R. E. WATSON, Manager. R. F. D. 2, Modesto, Cal.



Senior Yearling Heifer Maud T. of Edgewater

ALTA VISTA HERD
OF IMPORTED**GUERNSEYS**

Owned by Charles G. Lathrop, Stanford University, California, Offers for Sale Excellent Individuals of Both Sexes

YOUNG BULLS

The Animal Industry Division of the University Farm is offering for sale one yearling Holstein bull and two Jerseys, one a yearling and one a 4 years old. The Holstein bull is sired by Sir Colantha Juliana (65293), the former herd bull at the University Farm. The 4-year-old Jersey bull, Golden Lad of U. C. (103375) has been used as the herd bull at the University Farm. He is sired by Philadelphia's Glory (59033), out of Golden Melia (187336). The yearling Jersey bull is sired by Golden Lad of U. C.

UNIVERSITY FARM

DAVIS, CALIFORNIA

1896

1912

Venadera Herd of Registered Jerseys

Prize Winners and Butter Producers

Since founding the herd it has been our constant aim to breed cows that were high early producers of butter-fat combined with beauty of type. Our high authenticated yearly records, under ordinary dairy conditions, prove the success of our efforts as to production. Our winners in the show ring speak for the excellence of individual type.

We Generally Have Some Young Stock For Sale

Guy H. Miller MODESTO, CAL.



CLEMENTINE MABEL.

Guernsey Cow on Yearly Test, Whose Record Up to Date Appears in This Issue. Owned by J. W. Henderson, Berkeley, Cal.

RHOADES & RHOADES
EXPERT LIVE STOCK AUCTIONEERS

HORSES, HOGS, COWS—Sales conducted in all parts of California and adjoining states. Write for dates and terms

OFFICE, 1501-3-5 SOUTH MAIN STREET, LOS ANGELES, CAL.

Guernsey cows.

The milking herd at Alta Vista has an average butter-fat test of 5.2 per cent, and five of the cows are at present on yearly official test. Alta Vista has an up-to-date little creamery, equipped with a Ruld instantaneous heater, 50-gallon Victor combination churn and butter worker, De Laval separator, 12-bottle Babcock tester and a five-horsepower motor for power. The butter is put on the market in cartons bearing the Alta Vista label. There is no butter color used in Alta Vista butter, and it is remarkable that the cream from these Guernseys make up into a richly colored butter.

Later on we shall be able to publish the results of the yearly tests for the five cows now performing, and at the coming fairs we can assure our readers of a sight well worth seeing in the Alta Vista Guernsey herd.

Mr. Lathrop has been confined to his bed for some weeks owing to a badly inflamed leg, the result of a slight scratch which became infected, but he is improving at a rate which will probably admit of his visiting the fairs, provided he is willing to do his sightseeing from his automobile.

DIFFERENCE IN COWS.

The Right Kind of Cows Are a Source of Sure Profit.

Professor Oscar Erf emphasizes the fact that there is a vast difference between the profits yielded by the common cows and those of the cow whose ancestors have been noted for economical production.

A cow eats a certain amount of the



HELENA JULIANA BURKE OF
RIVERSIDE.

Purebred Holstein Cow. Owned by
B. F. Anderson, Modesto, Cal.

proper food and produces a certain amount of the milk. Some cows are capable of producing more milk from a given quantity of feed than others. In fact, some cows produce ten times more milk than others, and milk of nearly the same degree of richness. A cow consuming the same amount of food that the average dairy cow consumes and producing 350 gallons of milk per year produces it at a cost of 23 cents per gallon; a cow producing 470 gallons of milk per year produces it at a cost of 20.5 cents per gallon; a cow producing 710 gallons per year produces it at a cost of 14.5 cents per gallon; a cow producing 830 gallons per year produces it at a cost of 12 cents per gallon, and a cow that gives 950 gallons of milk in one year produces it for 9.5 cents per gallon. And so we might go on until we reach the production of Colantha 4th's Johanna, who, in one year, produced 3190 gallons of milk. If fed the same ration as the average cow she would have produced this prodigious amount for 2.7 cents per gallon. However, this does not hold true beyond a production of 900 or 1000 gallons, for the reason that animals producing such large amounts require and extra amount of feed and care.

If you find it necessary to change the horse's feed, cut the amount down for a time.



ARALIA DE KOL.



RIVERSIDE SADIE DE KOL
BURKE.

HOLSTEIN-FRIESIANS

OUR HERD HOLDS EVERY WORLD'S
RECORD FOR MILK PRODUCTION
FROM 7 DAYS TO 1 YEAR

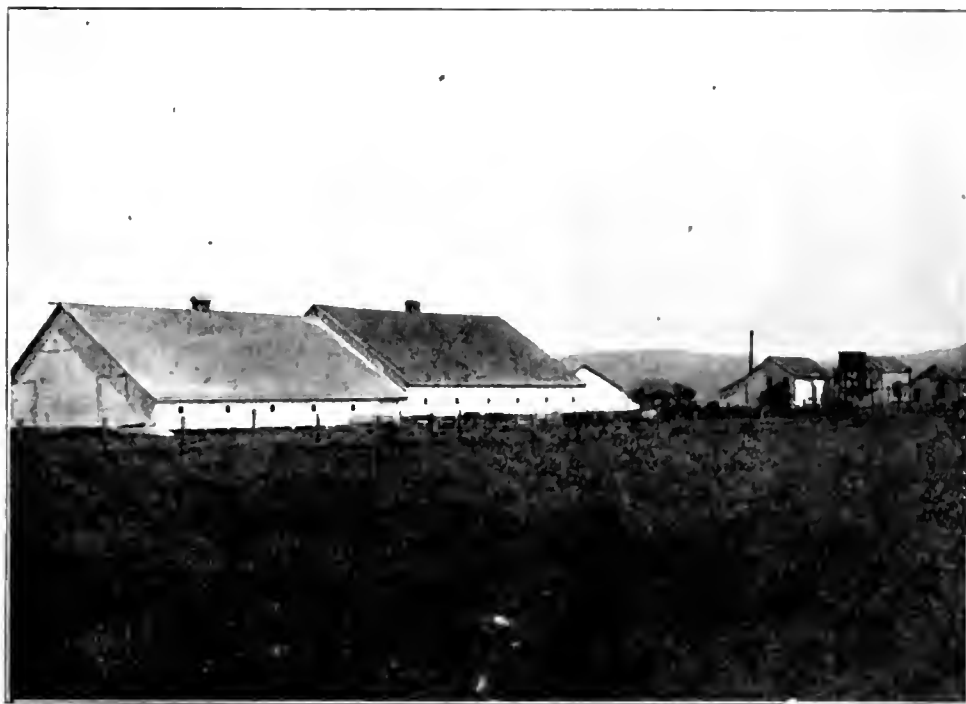
We are offering a few Young Bulls bred by a son of Aralia De Kol, our cow who holds the world's record for milk produced in one year on official test, and out of dams producing from 400 to 600 pounds of butter fat per year.

We also offer a few Bull Calves by our herd sire, King Segis Pontiac Emperor who is a grandson of Pontiac Clothilde De Kol 2d, and his dam a full sister of King of the Pontiacs.

We cordially invite inspection of our herd at the California State Fair.

A. W. MORRIS & SONS

WOODLAND, CALIFORNIA



Home of Pacific Guernsey Herd Loleta, California

C. S. RASSMUSSEN, Proprietor

Our Cattle have been selected from the Best Imported Strains

SEND FOR CATALOGUE

An Ideal Dairy in Dairyland

This is my first trip to Humboldt County, and I feel certain that I have discovered Dairyland.

Leaving Eureka I drove to Table Bluffs, then to Loleta. Descending the bluff I looked out upon a beautiful valley, all dotted over with dairy farms with hundreds of fat, sleek cows of the various breeds.

I drove over the C. S. Rasmussen's dairy farm, and was met by Mr. Rasmussen himself. After a cordial greeting I was invited to look over the farm.

It is, indeed, an ideal dairy farm, with everything arranged for convenience and proper sanitation. The large barn, 90x190, holds 120 cows, and everything in and about it is spic and span, while the smell of the hundreds of tons of new-cut hay is delightful.

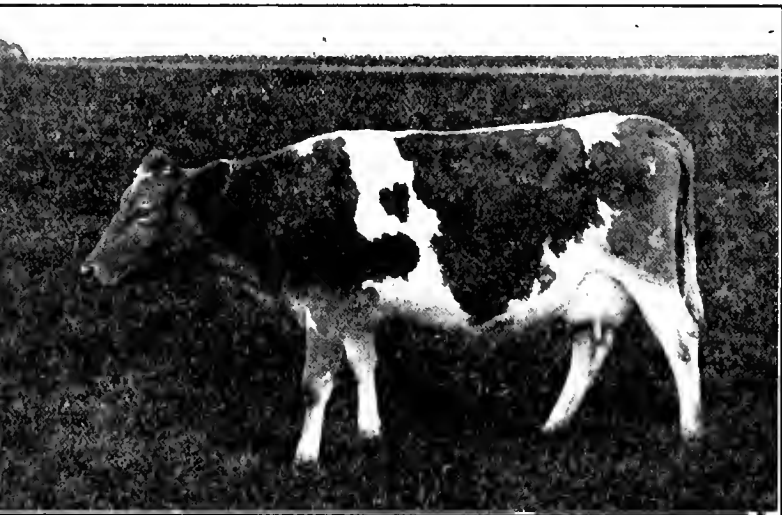
Mr. Rasmussen is at present milking 120 cows, but says that next summer he will milk 140 or 150. For a young man that is a pretty good showing. He is the proud owner of the Pacific Guernsey herd. While the Guernsey has been somewhat late in receiving recognition by our dairymen, those that are in this State are making good, and will be heard from

so Count, sire of twelve cows in the advanced register. Her dam is Queen Isabella, who traces back to Old Benjamin, an outstanding sire of the breed, who is out of Tucksey, a cow that stands out as the most notable matron of the breed.

R. WIELER.

The fourth entry in the University of California butter scoring contest was scored August 1st, and butter from Victor Baciarini of Suisun Creamery made the high score, which was 94½ points. The general quality of butter represented in the entry was fairly good considering the weather conditions. It is planned to score the fifth entry at the State Fair in September.

Under date of August 14th Frank Reed Sanders of Mesa, Ariz., writes *The Live Stock and Dairy Journal* that he is leaving for the coast fairs with three cars of pedigreed animals. Mr. Sanders is a breeder of Dutch-Belted cattle and Hampshire hogs, and has won numerous prizes in some of the leading shows of the country. This will be his first appearance on the Western fair circuit, however.



GYPSON ISABELLA.
Owned by C. S. Rasmussen, Loleta, Cal.

through their performance under tests. Here is the private record of Gypson Isabella (28978), a 2-year-old Guernsey, owned by Mr. Rasmussen:

	Lbs.	Av. %	Lbs.
	Milk.	Fat.	Fat.
April (25 days, 1911)	950	5.3	50.35
May	1364	5.3	72.29
June	1200	4.4	52.80
July	1066	5.4	57.56
August	809	5.1	41.26
September	675	5.2	35.10
October	727	5.3	39.10
November	576	5.6	32.25
December	514	6.0	30.87
January	486	6.2	30.16
February	466	5.7	26.61
March	496	5.4	26.78
April (5 days, 1912)	109	5.3	5.75

Totals and average 9448 5.3 500.88

There is nothing small about the above record when we take into consideration that she closed her year's work giving a pound of butter-fat a day. It is to be regretted that she was not on official test.

It is evident that the figures given for the month of June are wrong, resulting in a loss of about ten pounds that belongs to her credit.

Probably the most remarkable thing about the above test is the fact that this record was made on Humboldt pasturage, with no hay or concentrates fed at all. Well might we call this Dairyland.

The sire of Gypson Isabella is Gyp-

FINE YOUNG SIRE TO HEAD VENADERA HERD

Visitors at the State Fair this year will have an opportunity to see an exceptionally fine individual in Altama Interest, the senior yearling Jersey bull, who is being developed by Guy H. Miller of Modesto, Cal., to head his Venadera herd of Jerseys. Altama Interest is sired by Golden Interest, he by Interested Prince, who was third in aged bull class at the National Dairy Show held at Milwaukee. The dam of Altama Interest is Althea Altama, sired by Rioter's Jersey Lad, who has twenty daughters in the Register of Merit. The dam of Althea Altama has a record of 637 pounds of butter produced in one year.

Altama Interest is a well developed young individual of good conformation and dairy type, masculine without being coarse, good head, top and bottom lines, great barrel and handles well. It will take a mighty good bull to beat him in the show ring, but he was selected by Mr. Miller after a nationwide search for a sire capable of getting the highest producers as the head of Venadera herd.

There is no better or cheaper place to develop a young horse and put him in proper shape for market than on the farm.



Young Jersey Heifers at Rancho Dos Rios, Modesto, Cal.

RANCHO DOS RIOS.

The Home of Purebred Jerseys of Splendid Breeding.

Rancho Dos Rios, ten miles west of Modesto, Cal., was recently visited by a *Journal* representative. This ranch covers 4000 acres, and is owned by the Maillards. Manager R. E. Watson has 120 head of Jerseys on the place and ninety head are purebreds. Most of the cows were raised on the ranch, and their pedigree traces back to strains of Brown Bessie, Marigold, St. Helier, Stoke Pogis and other prominent females.

There are in service three fine bulls that were obtained from the Ladd estate of Oregon. Two of them are 3-year-olds, and they are splendid individuals. Darnida Darling's Volco (89009) is an outstanding individual. His sire is Darnida Darling's Diploma (71816), and dam is Mary Carmen (125357), 18 pounds butter in seven days. His grand-dam is Pride Olga 4th, 27 pounds butter in seven days.

The other young sire, a handsomely marked, light colored Jersey with all the points that make a true-to-the-breed bull, is Dos Rios Pogis (89008). His sire is Merry Miss Son (76629), and his dam is Sixty-Six, 18 pounds butter in seven days. His grand-dam was Gertie of Glynwyn (74474), and his grandsire on his sire's side was Marigold St. Helier (52657), having nine daughters in the register of merit.

The head of the herd is Laura Lee's Isidro (75667). His sire is Merry Malden's Grandson (71003), and his dam Laura Lee's Lily (172458), 60 pounds of butter in 28 days. His sire on the sire's side was grand champion bull at St. Louis, fifteen competing.

Most of the cows on Rancho Dos Rios average 5 per cent on butter-fat test. Some of the good producers are Sutura (195470), Almaria (195473), Estersta of Marin (179205). These cows

do better than fifty pounds of butter in thirty days.

At the time of our visit Manager Watson was thinking of making his initial trip to the State Fair as an exhibitor, and was also planning to show at some of the county fairs.

PROTEIN FOR HOGS.

Every practical feeder should know the principal elements of nutrition in all the various foods and grains to get the best results and largest profits from their feeding. These elements are:

First—Protein, the flesh, bone and muscle builder.

Second—Carbohydrates, supplying heat and energy.

Fourth—Fat or either extract producing fat.

Fourth—Mineral matter, bone forming material, largely phosphates.

Of these, protein is the most important, as it is absolutely necessary for the development of flesh and muscle in growing hogs. Without an abundant supply of protein they become weak in bone and muscle and fail to reach proper development. A ration deficient in mineral matter (phosphates, lime, etc.), produces hogs lacking in strength of bone and frame work.

In all ordinary feed stuffs carbohydrates and fats are found in sufficient quantities, but being short in protein and mineral matter, these feeds do not of themselves furnish a balanced ration. In supplying these deficiencies the feeder will do well to consider Digester Tankage, a packing house by-product, which analyzes 60 per cent protein, 6 per cent phosphates and 8 per cent fat. Digester Tankage is a dark colored granular meal made from fresh meat scraps which have been cooked under live steam to extract the grease and lard for human consumption. The animals from which this product is made have all been United States inspected and passed, hence Digester Tankage is free from any taint.

Digester Tankage grows better proportioned hogs, more lean meat and less fat, matures them earlier and at the same time satisfies their craving for animal food in some form. It contains sufficient phosphates to insure strength of bone and framework. In short, it is a most economical source of digestible protein containing twice as much as oil meal and five times as much as middlings, shorts or alfalfa meal.

Many feeding tests with and without Digester Tankage have been made by experiment stations and leading feeders. In nearly every case hogs receiving Digester Tankage have made greater and more economical gains than those fed without it.



CONEY LASS.
Purebred Holstein Cow. Owned by M. A. McLean, Modesto, Cal.

Dutch Belted Cattle in Their Native Land

The Live Stock and Dairy Journal— Dutch-Belted cattle are known in Holland as Lakenvelders, or Valldarkers, which means literally a field of white, but conveys the idea of a white body with black ends. The writer spent a number of weeks studying these cattle in this unique country, where high windmills are dotted over a land that is maintained from the inroads of the North Sea only by substantial sea-walls called "dykes." The early history of this breed is not fully understood, but from the records obtainable, and from conversation with several of the older breeders in Holland, it seems that these cattle began to flourish about 1750, and no doubt the system of selection by which this marvelous color breeding was attained dates back into the seventeenth century. One breeder says his father informed him that there were gentlemen of wealth and leisure near what is now called Haarlem, North Holland, who conceived the idea of breeding animals of all kinds to a certain color, chiefly with a broad band of white in the center of the body, with black ends. These noblemen had large es-

after a time the calves came with more and more certainty bearing the artificial color of the dams. There seems to be some doubt, even in Holland, as to the method employed to produce such distinct color markings, and nothing in the animal world shows more skill in breeding than the results of these Hollanders in the production of these different breeds, so strongly bred to color lines.

The Lakenvelder cattle of the present day in Holland, as in times past, are held by the wealthy class, and by a few breeders who supply the wants of those who desire these cattle, but do not care to breed them, and also to supply the demand for shipment to foreign countries. These cattle have already been exported to France, Austria, Germany, Spain, Portugal, South Africa, Mexico and the United States.

Most of the Lakenvelder cattle are found at present in the Province of Utrecht and North Holland. These cattle, as found in Holland, are larger than in America, and the belt is wider, often taking in part of the hips and nearly all of the animals have more or less white on the hind feet.



Dutch-Belted Bull. Owned by Frank R. Sanders, Mesa, Ariz.

tates, and it is claimed that for more than one hundred years they and their descendants worked upon the perfection of these peculiar color markings until they produced Belted cattle, pigs and poultry. That these breeders were wonderfully successful no one questions, as we have the results of their labors in the Dutch-Belted cattle, Lakenvelder poultry of England and America, and the Lancheswine of Holland and Germany, and the Hampshire swine of America, which were supposed to originate in Hampshire, England, but undoubtedly are descendants of the Haarlem herds of long ago. All of these breeds possess a belt, and carry out the idea of their originators in a marvelous degree.

The process by which these unparalleled results were attained seems to be hidden in the obscurity of the past. However, it is not difficult to understand that many years of careful selection might culminate in the desired end.

There is a custom born of necessity in Holland to place blankets upon cows recently calved, on account of the dangers of the damp and humid climate, as the cattle are never kept in stable during eight months of the year. It is maintained by some that white blankets were kept on these Haarlem herds on account of the neat appearance, and that from an accident calves came with white middles, and then the owners conceived the idea of placing artificial belts upon their cows of the required width, and

As dairy animals they possess a high order of merit, having small heads, slim necks, deep bodies, straight backs, broad level hips and large udders, and prominent milk veins. The writer saw a cow producing 80 pounds of milk on grass feed alone, and a number of others with capacity much in advance of the best records made in America by this breed.

There are, approximately, about one thousand head of Lakenvelders in Holland, many of which are not bred pure, but there are still a goodly number of herds bred with care, and animals can be found as near perfect in belt as can be bred.

Reference has been made to Lakenvelder cattle with white heads and black rings around the eyes. These are simply a cross with a breed of cattle common in Holland that possess this unique color, and the cross combines the two colors, presenting a very striking combination of color.

From a personal inspection of many herds of Lakenvelders, the writer was much impressed with them in their native land, on account of their splendid dairy quality, and it is to be hoped that our American herds will soon have an infusion of the blood of these animals, and it cannot fail to be of advantage, both from a dairy standpoint and from the increased vigor resulting in an out-cross.

FRANK R. SANDERS.

Arizona.



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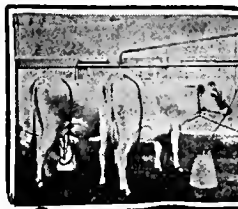
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Modesto, August 21, 1912.
C. F. Daniels & Son, Modesto, Cal.

Gentlemen—Have installed and used eight of the Hinman Milking Machines for four months on 100 cows, and find them to give the best of satisfaction in every respect.

Have found them excellent for milking cows with short teats. Two men milked my herd of 100 cows in not to exceed one and three-fourths hours. In all, I consider the Hinman Milker an absolute success. Yours truly,

E. T. THEOBALD.

C. F. DANIELLS & SON, Modesto, Cal., Agents for California and Oregon.

Silo manufacturers have been asked to erect examples of their best art to be filled with silage for the dairy demonstration at San Francisco in 1915.

A movement has been inaugurated

for holding a dairy Congress at the State Fair to discuss matters relating to the dairy industry, and to consider the advisability of holding a State Dairy Show in 1913 and every year thereafter.

Dairymen Win Their Point in Los Angeles

The Live Stock and Dairy Journal—

An account of the recent tuberculin test campaign in Los Angeles will be of interest to your readers.

In December last the City Council of Los Angeles passed a general compulsory tuberculin test ordinance requiring that all milk, after a certain date, offered for sale in the city of Los Angeles should be obtained from cows that had successfully passed the sub-cutaneous tuberculin test, and requiring that the test be repeated every six months.

This ordinance was passed at the instance of the Health Commissioner of the city, and was prepared and recommended to the council without any conference with or notice to the dairymen affected. As a consequence very few of the dairymen knew anything of it until after the ordinance was passed. They then became alarmed, and at once organized and incorporated the United Milk Producers' Association of Southern California for general beneficial purposes, but especially for the purpose of an organized effort to defeat the ordinance. About 350 dairymen furnishing milk to Los Angeles joined in this organization, although only about twenty-five of them resided within and were voters in the city.

The first step of the dairymen was to prepare and circulate referendum petitions to compel the ordinance to be submitted to a vote of the people of the city. Under the State law the time limit for filing referendum petitions was very short, but within that short time the dairymen secured over 22,000 signatures to the referendum petition, which was sufficient to suspend the operation of the ordinance. The effect of this was to compel the City Council either to repeal the ordinance or submit it to the voters of the city at the next city election.

A special city election was held on the 28th day of May, 1912, at which several other municipal questions were being voted upon, the tuberculin test ordinance was submitted to the voters at this same election. The dairymen marshaled their forces early and for about sixty days preceding the election they conducted a very active and thorough campaign of education.

At the beginning few people believed that any considerable number of voters could be induced to vote against the administration and the ordinance. After the referendum petitions were filed the Mayor and City Council had refused even to give the dairymen a hearing on the question of repealing the ordinance. The writer was made Chairman of the Campaign Committee.

The members of the Dairymen's Association contributed \$1 per cow to the campaign fund. This gave us about \$6000 all told for use in the campaign. Hundreds of thousands of copies of pamphlets, bulletins and handbills were printed and were mailed to all the active and influential voters and business people of the city, both men and women, and a house to house distribution of copies of all printed matter was twice made over the entire city, once about six weeks before the election and again about five days before the election.

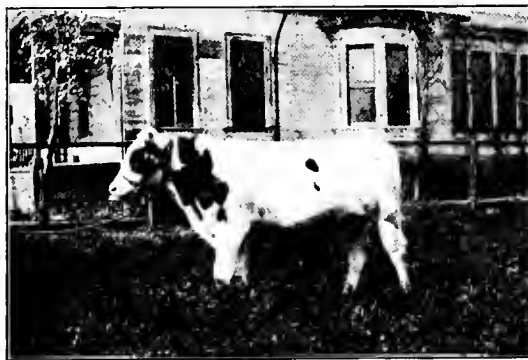
Nearly all the politicians of the city, all but one of the newspapers of the city, the entire city administration, a great many of the active club women of the city and every mother's son of the medical fraternity were actively supporting the ordinance.

In the early part of the campaign we greatly feared the women's vote, as we feared they would be too easily influenced by the sentimental appeal by the doctors on behalf of the babies

that were alleged to be dying by the hundreds from bovine tuberculosis, but as the campaign progressed it became evident that the women were less easily influenced by such appeals than the men.

About ten days before the election the medical organization became greatly alarmed and resorted to several kinds of extravagant campaigning. Among other things they rented several store fronts in the best shopping district where they exhibited the disgustingly diseased carcass of cows placarded as the sort of tuberculous cows from which the city's milk supply was obtained. They posted everywhere on the large billboards skull and crossbone signs, and a portrait of the devil eight feet tall wrapped in a red cloak with skull and crossbones in one hand and a cup of milk in the other, and bearing the inscription, "I drink to death," and stating that such was the character of the tuberculous milk being supplied to Los Angeles.

Also they hired hayrack wagons on



Colantha Sir Pontiac Aaggie (71084) at 10 months. Now 2 years of age, and owned by L. A. Hall & Brother. Sire, Colantha Johanna Lad; dam, Aaggie Cornucopia Pauline 3d, with butter record of 16.68 pounds at 2 years, milk testing 4.83 per cent; granddams, Colantha 4th's Johanna and Aaggie Cornucopia Pauline, averaged 35 pounds butter in 7 days, milk testing 4.32 and 4.17, respectively. Bought by Hall & Brother from D. W. Field of Massachusetts for \$1600 at 8 months.

which were loaded diseased carcasses obtained at the slaughter houses, and with large placards they paraded these up and down the thronged business streets as samples of the diseased condition of our dairy cows for the purpose of alarming the people into sustaining the ordinance.

The effect of all this was to embitter the fight and to intensify the interest in the issue, but it was manifest that more votes were lost than gained for the ordinance by such disgusting methods of campaigning. When the final vote came the dairymen had won by about three against two in favor of the ordinance.

Los Angeles was one of the first cities to adopt the initiative and referendum in our new charter, and this election was the first in America in which any question of a similar character relating to sanitary, health or food questions was ever submitted to a popular vote, and the result was certainly an eye-opener to the medical fraternity and politicians. Very truly yours,
S. A. W. CARVER.
Los Angeles, Cal.

LEARNING DAIRY BUSINESS.

The man who imagines he knows all there is to know about dairying without attending the short courses for dairying at the agricultural colleges, or without reading a reliable farm paper, is making a great mistake, because no man can hold all there is to know about the dairy business.

DESTROYING THE BARRIERS.

According to the advance reports from the Bureau of the Census (May 6, 1912) 1,620,766,000 pounds of butter were produced during the census year 1909, valued at \$405,000,000, of which 966,000,000 pounds were produced on farms and the balance in co-operative and other factories. For the census year 1909, the cheese production amounted to approximately 320,000,000 pounds, valued at about \$44,500,000. In 1909 there were 21,720,000 milk cows valued at \$702,945,000. These, taken in connection with the vast acreage, buildings and equipment employed, designate this industry as second to none in importance.

Any competition, no matter how honest, or otherwise legitimate, calculated to depopulate the farms or drive the farmer into other lines of activity, would result in great national loss.

When, therefore, this Congress is asked to pass measures subjecting butter, the most important dairy product of the farm, to unequal and unfair competition at the hands of a so-called

FRESNO COUNTY TO HAVE BIG FAIR

Liberal Prizes to Be Awarded—Good Races—Live Stock a Special Feature.

Fresno County is preparing to make the sixth annual fair of the Fresno County Agricultural Association eclipse all previous fairs by a wide margin.

There has already been a great deal of enthusiasm aroused, and many communities as well as individual exhibitors are going after the liberal prizes offered.

The race track has been put in ideal condition, and many other improvements are being made. A portion of the old grandstand has been torn down to make room for a new and larger one that will be modern in every way. A miniature park has also been laid out.

Many Fast Horses to Enter in Races.

There will be more entries this year in the races than ever before, as the horses that compete at Sacramento will practically all be entered at the Fresno County fair.

Liberal prizes are to be awarded for the races, and with the many horses that are to be entered there should be some very high-class exhibitions.

Many Prizes for Live Stock.

Live stock exhibits are to be a special feature this year, and everything possible is being done to induce breeders to make extensive exhibits. Many prizes are being offered, and they are liberal prizes, too.

Already a sufficient number of breeders and exhibitors have signified their intention to show live stock to insure the exhibit outstripping all former ones.

Among other features of special interest will be the milking contest, with extremely liberal prizes offered. Great interest in this event is being evinced by dairymen, and many are preparing to enter herds in this contest.

There will, of course, be numerous other exhibits, such as poultry, grain, fruits, seeds, flowers, vegetables, domestic work, etc., with prizes to be awarded in the different classes.

The general and wide-spread interest that is being taken, the comprehensive plans, the preparations that are being made and the support that is being met with all indicate that the 1912 Fresno County fair will set a new standard. It is being advertised extensively.

The Journal is in receipt of a handsome catalogue from Hemet Stock Farm, located in Riverside County, Cal. The catalogue is nicely illustrated, showing various scenes on the farm, and contains extended pedigrees of the stallions and brood mares kept at the institution. Hemet Stock Farm was established in 1909 as a complete breeding and training place for trotting stock, and the richness of blood that was selected for the maintenance of the stables gives assurance that some champion trotters will be produced there. In fact, it has already taken front rank among the breeding establishments of the country by producing the world's champion yearling stallion, Wilbur Lon, 2:19½.

G. O. Hillier, a well known Stanislaus County breeder of Jersey cattle, returned from the East early in August, and, since arriving home, has received several carloads of Jerseys that he purchased while away. He brought out some splendid individuals. We expected a letter from Mr. Hillier, with a story of his trip and a detailed account of the stock he purchased, but it failed to arrive. Perhaps we can tell more about his herd in a future issue.

WATER AND SALT FOR CALVES

Calves, like other farm animals, get thirsty, even though milk forms a large part of their ration. Calves 3 months of age will drink a much as five quarts of water daily. They like to drink often, sipping a little at a time.

A half-barrel, cleaned and replenished twice daily, will serve richly as a water trough. Another good device is an automatic waterer, which may be easily cleaned, situated a little above the door to keep out the litter. Salt is essential to the development of the calf, as of other animals, and should be kept continually available.



THE HORSE



Percheron Breeding in the United States

(By Wayne Dinsmore, Secretary Percheron Society of America.)

Slowly but surely the Percheron breeders in the United States are following the trail laid out by American cattle breeders. Shorthorn, Hereford and Angus breeders have brought their breeds to a position in number and excellence, unexcelled in the world. Slight progress was made in cattle breeding until the number bred in this country made selection possible; and the most rapid progress came after the breeds were well distributed, and purebred animals had become fairly easy to locate in the chief breeding districts.

In the past the breeding of Percherons of the best possible type has been retarded because of the limited number of breeding animals from which selection could be made. The fact that the available animals were widely scattered over a vast area of territory still further handicapped the work of constructive breeders. Selection and assembling of the best females was impossible.

These conditions still prevail in some degree, but much less than formerly. An analysis of the registrations of American bred animals made between August 1, 1910 and May 1, 1912, has recently been completed by the Percheron Society of America.

The three leading states are those oldest in draft horse breeding—Illinois, Iowa and Ohio. Ohio was earliest with Percheron importation in 1851, but Illinois breeders purchased the greatest of the early sires—Louis Napoleon—in 1856, and between that time and 1880 imported many times more Percherons than Ohio. Iowa breeders started with the breed almost as soon as their co-laborers in Illinois, and, like Illinois, established a greater number of breeding centers than Ohio, prior to 1880. From these three states, pioneers in draft horse breeding, the spread has been gradual into adjoining states. It is a matter of surprise that Indiana, lying midway between Illinois and Ohio, should have made less progress in recent years than Kansas and Nebraska.

The wide distribution of Percheron mares means a more general demand for the best Percheron sires. The number of men who own and are breeding Percherons now in excess of 6000 active breeders will inevitably hasten the production of better Percherons than have heretofore been bred in America. American farmers are excelled by none in the world in intelligence and skill in their live stock breeding operations, and the work of so many keen minds cannot fail to bring a wonderful improvement in the breed

within the next few years.

Careful selection of the best is now possible, although difficulty will still be encountered on account of the area which must be covered in making selections.

Success in breeding live stock is hard to win. This is particularly true in horse breeding. The development of Percheron breeding in the United States has been hampered by enemies of the breed, by division in the ranks of its supporters and by much hostile criticism from would-be authorities on breeding problems. These are incidents, history teaches us, in the development of every great breed of live stock, and the steadiness and cool judgment displayed by Percheron breeders in surmounting all such difficulties have probably never been excelled under similar circumstances.

The 15 months' old saddle colt, Angelus Denmark (No. 5100, American Saddle Horse Register), owned by Mr. W. Bernstein, Hanford, Cal., will be one of the attractions in the saddle horse classes at the coming California State Fair. Angelus Denmark is sired by Lord Denmark, and gives great promise of developing into a worthy son of his noted sire.

The farmer who advertises an article or animal for which there is a good demand is likely to get a better price than if he did not advertise. While it is true that competition among sellers lowers the price, it is equally true that competition among buyers increases the price. For instance, if a man advertises a fine cow for sale and fifteen farmers come to see the cow, the chances are he will receive much better offers than if only two or three persons were anxious to purchase. Advertising increases the number of prospective purchasers. The farmer who has good stock and knows that it is good is missing his opportunity if he does not tell the farmers of the country through the advertising columns of the farm papers.—T. Z. Richey, in N. Y. Tribune-Farmer.

Stanislaus County will have a big agricultural, live stock and dairy exposition October 3d, 4th and 5th. It will be the first fair held in that prosperous agricultural center, and the energy and enthusiasm that the various committees are putting into their work augurs well for the success of the initial effort. A large fund has been collected through contributions from the county, the breeders, business men and others, and this assures plenty of money for all expenses and for liberal cash prizes. It is expected that the live stock exhibits will be a feature, as Modesto is now quite a breeding center, and there is much purebred stock within the county.

The poultry department will be handled by the Stanislaus County Poultry and Pet Stock Association, and a very good show is anticipated.

Sore back on horses is often caused by the shafts bearing too heavily on the back. See that the shafts are so hung that when rocker plates are level the shafts will stand high enough to enter the tug straps, then they will not press down on the horse's back. Give the horse twenty-four inches in width between shafts at narrowest part.

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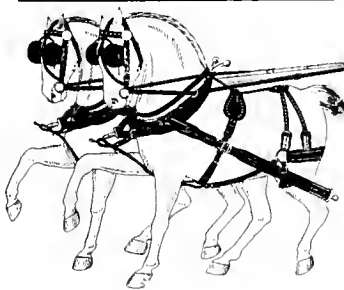
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Established 1879

Favors Clydesdales

The Live Stock and Dairy Journal—I have often been asked why I prefer Clydesdale horses. In the first place, being a Scotchman and having had experience showing horses at some of the leading fairs in Scotland, Canada and America, also having had the honor of judging at state fairs, I find that in conformation the Clydesdale has no equal. He has wide hoof heads, springy pasterns and a quality of bone superior to any other draft breed of horses. A judge at a show ring takes into consideration the peculiar conformation of what stands for legs in some draft breeds. So many people look at bulk and ponderosity instead of draft horse conformation and quality.

As a sire the Clydesdale is very potent, and imprints his character on grade mares with fidelity.

Take Clydesdales in the show yard. They come to the ring with rope halters and need no one to chase them up and down the ring with whip or shouts.

At the International at Chicago, for example, there is competition for draft gelding in harness, Percherons, Shires, Belgians and Clydesdales competing. Clydes have won first six years in succession in two, four and six-horse hitch, which is a fair illustration of his superiority over other draft breeds.

No breed of heavy horses can make such an imposing display, both in the walk and trot. There is grace, boldness and a game bearing of the head which cannot fail to attract attention.

As a matter of fact, the Clydesdales of the present day have been bred for over a century upon very similar lines to those now most approved by breeders, and the breed is growing in popularity everywhere.

Robert Ashley Fairbairn of Westfield, N. J., purchased from William Ritchie, Aberdeenshire, Scotland, an acquaintance of the writer, a mare, Harvistown Baroness, champion mare at the Highland Society show, this year for \$5000.

Another Clydesdale mare went to the British Columbia Experimental Station for \$5575, and a stallion left the same show ring for Western Australia at a very long figure.

These are just a few instances of their coming popularity. The confidence that Scotchmen have in the Clydesdale breed was demonstrated by their retaining the celebrated stallion, Baron of Buchlynic, at the world's record price on a draft horse of \$47,500.

Considering what the Scotch breeders have done in bringing the Shorthorn cattle, the Angus, the Galloway and

the Ayreshire to high standards, our opinion is that Clydesdales will remain one of the great draft breeds.

And if farmers generally would keep in view the ultimate use to which the draft horse they raise is to be put, and give prominence to quality, substance, weight and soundness instead of color of hair and other minor considerations in choosing their stallions and mares, more money would come into their pockets and the markets would be full of choice geldings, for which the draymen are anxious to pay long figures.

JOHN TROUP.



Jack Rogers 4576

Won First Prize at State Fair in 1911 in saddle class, 2 years and under 3, and also won second in combination ring among aged horses. He fills the eye of lovers of good horses. I stand him at the low sum of \$20.

Also Col. Rogers (3287) at the same price.

Their colts will sell at sight to any one wanting a fine saddle colt.

J. T. RAGSDALE

Breeder and Trainer of Five-Gaited Saddle Horses.
MERCED, CALIFORNIA.

MINNEWAWA STOCK FARM

Four

Registered Percherons

Stallion and three mares. Not akin. Colts from all shown. Price for the bunch, \$4,000.

M. E. Sherman,

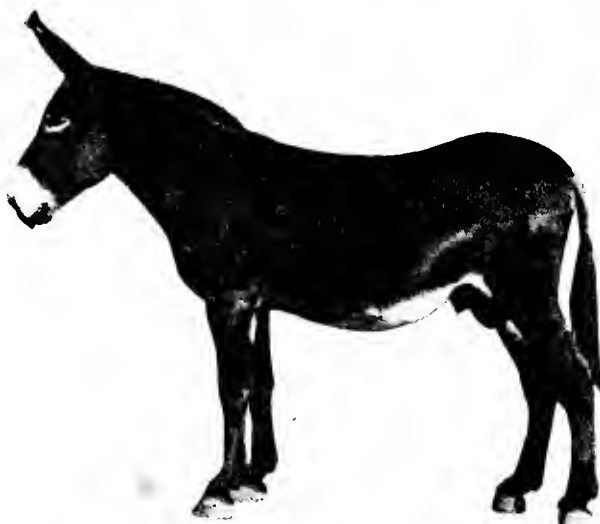
Fresno, Cal.

Horses, Mules & Shetland Ponies

I both buy and sell mules and horses. Have on hand at all times mules to hire in carload lots. Also breed Shetland Ponies, and have several weanling colts and a few well broke ponies for sale.

J. L. MENDENHALL.

WILLIAMS, CAL.



One of the Big Jacks Brought to California in 1911 by H. B. Thornberry.

Big Fair Assured

As time is drawing near for the opening of the 1912 California State Fair the success of this year's exposition is being assured, according to the Directors of the State Agricultural Society, who have never been so well pleased with their efforts as they are at present.

Every feature of the Fair is now well in hand—exhibitors are already bringing their live stock and farm products to the Fair, and the horse-men are getting their harness stock in the best of condition for the speed events, which, this year, will be for prizes aggregating \$30,000. The amusement program takes in a larger scope of features than has ever been attempted in the past.

In the live stock department the exhibits are over-running the space allotted to them, and at this late day the State Agricultural Society finds it necessary to make more stock room. A new hog barn is being rushed to completion on account of the large number of entries in this department. Four barns with forty pens each which were large enough in the past will not hold half the swine this year. The Berkshires will predominate in the hog barus. The Holsteins will aggregate in value about \$100,000, and this will be scarcely more than 100 head of stock. One of the large exhibitors of Dutch-Belted cattle is sending \$30,000 worth of cattle and hogs from Mesa, Ariz. The beef cattle will occupy considerable space, judging from the large number of entries of Short-horns and Herefords. Several carloads of stock will be shipped to Sacramento upon the close of the Oregon State Fair at Salem.

The exhibits in the main pavilion, which was originally built to take care of the different counties of the State, will have to find shelter, partially, in a temporary pavilion or annex. The annex which was just completed is about the size of the main pavilion itself, but has a wooden floor and sides with a canvas covering on top. Several counties, as well as a number of large exhibitors, will have to be contented with space in this temporary structure. At the present rate of increased popularity of the State Fair it will be necessary to make enlargements to each of these pavilions, because this year neither the main pavilion, the manufactures building nor machinery hall will half accommodate the demands for space. All of the exhibit room was sold out early in August, and to take care of the automobile displays and the vehicle departments it is necessary to erect large tents on the ground.

The principal amusement feature at the Fair will be a roundup of cowboys in a big open tournament wherein the cattlemen will have an opportunity to show their skill in handling stock. One of the principal competitions of the roundup will be the cutting-out contest, in which a cowboy cuts out a steer in a herd, which has been designated by the judges. He has to cut this steer out and rope him by the horns and bring him to a standstill ready to brand, once every day during the week, for a prize of \$300. This prize will be divided into \$150 first prize, \$100 second prize and \$50 third. By having the competition last through the week a cowboy will have to depend on skill alone, and not get away with a luck start, which might be the case should the prize be awarded for a single day's contest. A saddle will also be included for this prize. A number of other large purses and trophies will be put up for such events as the championship broncho busting, team roping, steer wrestling and numerous other events that appeal to the cowboys. The cowboy tournament will bring a couple of hundred or more

LAFAYETTE STOCK FARM

J. CROUCH & SONS Props.

LAFAYETTE, INDIANA

Mr. G. R. Crouch, junior member of our firm, has returned from Europe with an importation of Stallions and Mares, among which are some of the outstanding winners of the great French shows.



AT THE PARIS SHOW OUR HORSES WON AS FOLLOWS:

In the Aged Percheron Stallion Class.....	1st, 2d, 3d and 4th
In the Three-Year-Old Percheron Stallion Class.....	1st
In the Two-Year-Old Percheron Stallion Class.....	2d and 3d
In the Aged Percheron Mare Class.....	1st and 2d
In the Three-Year-Old Percheron Mare Class.....	1st

AT THE ALENCON SHOW WE WON AS FOLLOWS:

In the Aged Percheron Stallion Class.....	1st and 2d
In the Three-Year-Old Percheron Stallion Class.....	1st and 2d
In the Two-Year-Old Percheron Stallion Class.....	1st and 3d
In the Aged Percheron Mare Class.....	1st and 2d
In the Three-Year-Old Percheron Mare Class.....	1st and 3d
In the Two-Year-Old Percheron Mare Class.....	1st and 3d

Our new importation includes all of these great prize winners and a great lot of other high-class Percheron and Belgian Stallions and Mares. A representative number of these fine individuals are now in California at the permanent stables of J. Crouch & Sons at State Fair grounds, Sacramento.

J. F. CAMPBELL, Manager.

Sacramento, Cal.

Phone, Capital 31.

Jacks! Jacks! Jacks!

On the California State Fair grounds, during the State Fair, I will have 36 head of big Missouri Jacks from 3 to 7 years of age, and all but two are 15½ hands and over, standard measure, several reaching 16 hands, and two 16 hands and 1 inch.

Every One Registered and Pedigreed Every One Black with White Points

They are without doubt the best lot of Jacks ever seen in one lot on the coast. Among this bunch is **MISSOURI WONDER**, who is undoubtedly the greatest living Jack in the world today. He is winner of twenty-two first premiums and grand championships in Missouri, Illinois and Kentucky; also winner of the Silver Trophy for Grand Champion Jack from all states, awarded at Sedalia, Missouri, the Missouri State Fair by the American Breeders' Association.

This Jack has never in his life been defeated in the show ring, and he is worth coming a long way to see even if not in the market to buy.

PRICES RANGE FROM \$1250 UP, AND THEY WILL BE SOLD WELL WORTH THE MONEY AND UNDER MY USUAL GUARANTEE, WHICH IS WITHOUT DOUBT THE BEST GUARANTEE PRINTED OR GIVEN TODAY WITH ANY CLASS OF BREEDING STOCK IN THE UNITED STATES, AND MY GUARANTEES ARE ALL MADE GOOD TO THE LETTER.

I will also have on hand at the State Fair a carload of the best Registered and Pedigreed Jennets possible to procure. They will be of the large, heavy boned type which raise the premium Jacks, such as will be seen in the load advertised above. Money will not buy better ones.

My one aim is to have none but the very best, either in Jacks or Jennets, as the best is the only kind I believe in having, or upon which I will put my name to a guarantee, and they are the only kind which will advance the breeding of the best purebreds in California.

Many of us are striving in the purebred stock field to place California at the top of the list of all states, and the prospects look most encouraging. With a little more co-operation among breeders the desire will be fully realized. The stock may cost a trifle more at the beginning, but the profits of the yield will be much greater in proportion.

Come to the California State Fair and see my stock whether you want to buy or not.

H. B. Thornberry, Stockton, California

P. O. BOX 679

of the best riders in the State to Sacramento. One delegation will be here from the Salinas section, where the cowboys recently held their second annual Rodeo.

The big tent for the saddle horse show has been made ready for the opening of the Fair. The program for the horse show indicates that technicalities will be swept aside in the competition for blue ribbons, and cash prizes, and that the show horse, in order to win the prize, must go through his paces in lively fashion.

ENTHUSIASTIC NEW MEMBER OF THE PUREBRED SIRE LEAGUE.

R. D. McFarland, Secretary, Sacramento, Cal.—Enclosed find Purebred Sire League pledge signed. This is one of the greatest steps in the right direction you have taken for the advancement of grading up all classes of live stock, and I hope you will get enough support in this direction that it will make every man using a mongrel or scrub sire ashamed to be seen. It is the lack of education along these lines that makes so many so indifferent to purebreds. I was the first man to bring purebreds into this valley some twenty years ago, and during that time I have brought in Shire, Coach and Percheron stallions, Poland China, Duroc, Hampshire and O. I. C. swine, and Shropshire sheep. They have cost me lots of money, but the returns are so much greater that the first cost is hardly to be compared or mentioned. I have just brought in a purebred Holstein bull to head my dairy herd.

I have read your paper continuously since it started, and I consider it one of the best mediums to advance the live stock interests in our State. Keep up the good work. C. P. GOULD, Monterey County, Cal.

ALFALFA AT WILLIAMS, CAL.

We recently had an opportunity to see the alfalfa field on the ranch of J. L. Mendenhall at Williams. Our readers will remember the picture of the pumphouse on Mr. Mendenhall's place which appeared in the June issue of the Journal. There is a fine stand on the thirty-five acres two crops having been cut already and two more will be cut this season. Mr. Mendenhall has 1000 acres a little further out, and is soon going to try and get water on this place. If successful he will immediately plant 500 acres to alfalfa. On the way to Mr. Mendenhall's place we had an opportunity to see the land in the Forgeus addition, which is just at the edge of the town of Williams. Much of this has been leveled and checked, and some is already planted to alfalfa, showing a good stand where it has had sufficient water. We understand that most of this tract has been sold to local people in tracts of five and ten acres. Just adjoining this we found Mr. Mitchell, the well known Williams butcher, putting the finishing touches on the checking of a 75-acre field which he will plant to alfalfa. These improvements are the beginning of others which will rapidly change the complexion of the country surrounding Williams from brown to green, and the green will be the long kind which makes the banks buy adding machines.

The Secretaries of the Breed Record Associations in the United States have been asked to act as Superintendents for their respective breeds at the live stock show of the Panama-Pacific International Exposition at San Francisco in 1915. Many of the Secretaries have already been authorized to act as representatives of their association. This will inspire confidence in the exhibitors and insure a more representative display.

California Purebred Sire League

—For—

Promoting the More General Use of the Purebred Sire on California Farms.

R. D. McFARLAND, Secretary,

423 J Street,

Sacramento, Cal.



Pledge Cards of the Purebred Sire League will be sent to any address upon application to the Secretary.

The pledge is as follows:

- (1) To use none but a Purebred Sire in the breeding of all farm animals.
- (2) To advocate the general use of Purebred Sires.
- (3) To work for the betterment of Purebred Sires in breed-character, individual excellence, soundness and prepotence.
- (4) To discourage the use of grade, mongrel or scrub sires, and all dams, irrespective of breeding, that are diseased, hereditarily unsound or otherwise unfit in conformation and character.

THE PREPOTENT SIRE.

(Address delivered by G. A. Dimock, Kalamazoo, Mich., before the Ohio Dairymen's Association at Columbus, February 9, 1912.)

In considering the great value of a prepotent sire let us first seek for a better understanding of the qualities that go to make up such a sire. Warfield has well said that "prepotency is the superior influence of one parent over the other in determining the character of the offspring," and with this definition in mind we can well understand how great may be the influence of such a sire. It is also well for us to understand something of the laws of nature that have a bearing on this great question. The most important of these is covered by the old expression that "like produces like," and upon this great law, more than upon any other, rests the art of the breeder. He has to reckon, however, not alone with this law, but also with the law of variation and the fact that the qualities, not of the sire himself, but of his ancestors may sometimes appear. It has also been found that an animal that has been bred for a long time along certain given lines is more apt to be prepotent because the qualities he possesses have become fixed and are therefore transmitted from one generation to another with a greater certainty. This accounts for the fact that animals that have been

purebred for a long time are more apt to be prepotent, as are also the offspring of prepotent sires. It has also been found that animals that are linebred, or in other words, traced back through several different lines to the same great ancestors, are more apt to be prepotent. This is due to the fact that "heredity transmits with certainty only what has become a fixed characteristic in the race." Breeders have also found that the greater the number of the ancestors that have shown unusual merit and the nearer they appear in the pedigree to the animal in question the better.

The above principles will be of help to us in our search for the prepotent sire, but it is not always easy to recognize him when found. Hambletonian 10 was not recognized as one of the greatest sires the world has ever produced until long after he was dead. The great Jersey bull, Stoke Pogis 3d was sold for beef before his real worth was known. The great Jersey cow, Jacoba Irene, was bought for about the price of an ordinary purebred, and two of the greatest Holstein cows now owned in New York state were bought in Ohio for almost nothing because their owner did not appreciate their real worth. When animals of this kind are given a chance to show what they can do in other hands the loss is not so great, but when sacrificed in our slaughter houses as an offering to lack of knowledge and

proper business methods the loss is a pitiable one.

Nowhere does the saying that "the best is the cheapest" apply more forcibly than in the selection of a sire, and the sooner this fact is thoroughly recognized by us the better for all concerned. The importance of this fact will be better seen when we consider how rapidly the individuality of a herd is changed. With the first cross we have introduced 50 per cent new blood, with the second cross 75 per cent, with the third cross 87½ per cent and with the fourth cross we have introduced nearly 94 per cent new blood, so that the offspring from the fourth cross carry only about 6 per cent same blood as the original herd. Thus in a very brief time we have almost a complete change in the character of our herd, and whether that change is a marked advance in the right direction or a step backwards depends upon the wise or unwise selection of the sires that have been used. Just think of it for a moment. Nearly 94 per cent of the blood in the last generation is of our own choosing! How important then that we should make a wise choice because the wisdom of that choice determines whether the individual members of the herd are to be worth a few dollars or a few hundred dollars each. If we economize here we are certainly "penny wise and pound foolish," and I believe we can truly say that there is no place except in the education and care of his family where a farmer can invest money to as good advantage as in a high-class purebred sire. By this I do not wish to suggest that one should pay more than an animal is worth, but if they are bought "worth the money" they will repay the investment many times over.

Many farmers have been content to milk and care for cows that at the best are only able to produce about 150 pounds of butter-fat in a whole year. The greatness of this loss can be better understood when we remember that the dairy cattle of the country produce over \$800,000,000 annually, and at a conservative estimate one-third of the cows that helped to produce this vast amount of wealth are kept at an actual loss, another one-third hardly pay for what they eat, so that all the net profit is made by the other one-third. Considering the millions upon millions of dollars that are thus lost each year we can better understand the great need and importance of better and more prepotent sires.

255—MULES, HORSES, JACKS—255

TO BE SOLD TO THE HIGHEST BIDDER AT

Linden Stock Farm, Linden, Cal.

ON SEPTEMBER 21, 1912

This lot contains 210 mules from 3 to 4 years old. This is the great opportunity of the season to buy good, big, young work stock at the price you are willing to bid. I will also sell 40 head of good young draft mares and colts, 4 big Jacks and one Percheron Stallion.

Special train leaves Stockton, September 21st for Linden.

LINDEN STOCK FARM, Linden, San Joaquin County, California

WARREN H. HORD, Proprietor



THE SWINE HERD



Poland Chinas

I have sold everything that was old enough for service. Read about the big sale of Poland Chinas from Kings County in this issue. But I have fifty fine pigs farrowed in June and July.

W. Bernstein

HANFORD, CAL.

PURE BRED

O. I. C. SWINE

For Particulars Inquire of
or Write to

EMILE E. LARSEN, Camino, Cal.

MULEFOOT HOGS

Prolific and hardy. Try one of our Boar Pigs and you will be satisfied. Have some pure blooded pigs. Have also a few half-bloods at reasonable prices. Orders and inquiries receive prompt attention.

BRYANT BROS.

Lemoore, California

HILLMONT FARM

High-Class Registered

BERKSHIRE HOGS

Write for Information or Come
and See.

CHAS. GOODMAN, Williams, Cal.

O. I. C.

Ohio Improved Chester White.

"The Big White Hog"

Fast Growing, Early Maturing
Big, Healthy and Prolific

Our offering is large and excellent, consisting of young stock of both sexes, from weanlings to service size.

Tested sows and service males of all ages.

Stock furnished not akin.

Registered and crated free.

We are located near Mills, 12 miles east of Sacramento, on the Folsom Road.

During State Fair week we will be pleased to meet interested parties and take them out to look over our stock and make their own selection.

Studarus and Cunningham

Mills, California

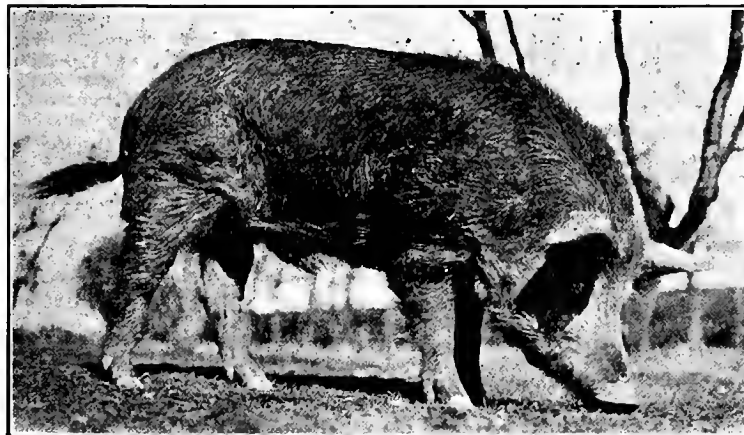
Hog Cholera in California

(Written for The Live Stock and Dairy Journal by Fred M. Hayes, Agricultural Experiment Station, University of California.)

Experience during this last year in the distribution of anti-hog cholera serum has demonstrated the fact that many ranchmen are unable to recognize the symptoms and lesions that attend cases of hog cholera. Hog cholera is a rapidly infectious disease, and loss of time in making a proper diagnosis results in a general dissemination. In such cases anti-hog cholera serum does little good.

It is unfortunate, perhaps, that hog cholera manifests itself by a variety of symptoms. To those who are not constantly in touch, and do not fre-

the bladder is shown by redness of its lining; haemorrhagic spots on the kidneys varying in size from the point to the head of a pin. The kidneys are often pale and light colored, showing these black spots, but may be dark and congested. The kidneys may be thickly covered with these spots, or possibly only a few of them may be seen by stripping off the envelope of the kidney. The kidneys sometimes resemble a turkey egg in appearance. The spleen is usually enlarged, congested, black and friable. Inflammation of the intestines, more especially the mucous membrane of the caecum, the beginning of the large intestines, often occurs. This inflammation may be diffuse or in the form of ulcers, depending upon whether the acute or the chronic type of the disease exists. The presence of button-shaped ulcers in the large intestines is the best indication of chronic cholera. The



NIMROD 3D.

Tamworth Herd Boar at Swineland, Yuba City, Cal. An Excellent Tamworth Type.

quently see, sick hogs, the symptoms may not appear characteristic enough at the beginning of outbreaks to warrant a diagnosis of cholera. Many farmers remark that hog cholera in California is not like that they have seen in the East. It is the same disease, with the same symptoms and lesions, but modified to some extent, no doubt on account of differences of climate and feeds.

The surest means of making certain that cholera exists is by means of a post-mortem examination of the first hog that dies. It may be to advantage to kill a sick one to avoid delay in taking proper measures to check an outbreak.

All farmers should either post-mortem every hog that dies under circumstances at all suspicious or have the work done by a competent veterinarian, who should be able to recognize any lesions indicating the presence of an infectious disease in the herd. These conditions, if recognized early and proper methods of isolation instituted, might prevent the general dissemination of the disease throughout the herd.

Lesions Found in Hog Cholera.

In cases of hog cholera the lesions will vary according to the course of the disease, but the following are usually present: Slight inflammation of

outer covering of the intestines may show red blotches in the acute type. Diffuse inflammation of the inner surface of the stomach, congestion of the lymphatic glands along the intestines and between the lungs, haemorrhagic spots on the lungs varying from one-eighth inch to entire congestion of all the lobes with accompanying loss of function, is frequently seen.

In the highly acute form the lungs may show very little change except possibly a few red spots. In the less acute form parts of the lung resembles liver tissue, and in chronic cases may be filled with pus with adhesions to the chest walls. Inflammation of the covering of the heart may also exist. Examination for these changes should be made as soon as possible after death of the animal.

In making post-mortems a quantity of disinfectant should always be near by, so that the hands may be disinfected thoroughly after the operation or in case of accidental cuts, immediately, to prevent blood poisoning or other infection.

How Hog Cholera Spreads.

It is important to remember that hog cholera is highly infectious, and that all of the excretions of the sick hog are capable of producing the disease. For this reason there are many ways by which the disease is scattered, and these may be avoided. The ma-

See Nimrod 3rd The Great Tamworth Boar at the State Fair

We are offering young
BOARS that will be
READY FOR SERVICE
THIS FALL
at \$25.00 each, registered
Tamworth, Duroc-Jerseys
and Berkshires.
ORDERS FOR FALL PIGS
SHOULD BE SENT IN
IMMEDIATELY, for our
books are rapidly filling.

Swineland
YUBA CITY, CAL.

RED DUROC HOGS

Best Bred Stock Now in
California

YOUNG STOCK AND SERVICE BOARS AND
SOWS FOR SALE

All registered pure-breds, and from such sires as Wonder and Klondike. New Importations from Missouri and Indiana. We are located in the Imperial Valley, and are here to supply California, Oregon and Arizona breeders. Write for prices and pedigrees to

MOORE BROS.,

Box 202, El Centro, Imperial Co., Cal.



Recorded Mule Footed Hogs are very prolific as well as less susceptible to Swine Diseases. Their great vitality, large litters and quick growth make them the coming hog. JOHN H. DUNLAP, Box 499, Williamsport, Ohio.

Roselawn Stock Farm

WOODLAND, CAL.

BREEDER OF SHORTHORN CATTLE,
POLAND CHINA HOGS,
SHROPSHIRE SHEEP

T. B. GIBSON

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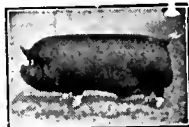
FOUR OAKS STOCK COMPANY

Woodland, California

BREEDERS OF BERKSHIRE, HAMPSHIRE AND
POLAND CHINA HOGS.

Of the Very Best Strains.

Our Herd Boars are Artful Masterpiece (110970), by Masterpiece (77000), and Ravenwood Longfellow 10th (136430), by Longfellow's Rival 5th (121891). Our sows are of equal breeding and merit. Come and see for yourselves. Twenty-two trains pass our door on the Sacramento and Woodland Electric Railroad every twenty-four hours. Stock for sale at all times.



nure of the sick hog is perhaps largely responsible for the rapid spread of the disease since this excrement contaminates the pens, houses and feeding floors, and is in contact with the hogs at all times. Various animals, as dogs, rabbits, cats, coyotes, buzzards, crows, pigeons and other birds, may carry the germs to another herd. Often when a hog dies the owner thinks little of it, and the carcass is allowed to remain in the pen to be eaten by other hogs. Or the carcass is left in the field as a prey to other meat-eating animals. This hog may have been the first to be infected and die of hog cholera, and by this method of disposition the seed is sown for a good crop of cholera in the neighborhood. In known outbreaks, carelessness in disposition of dead carcasses may result in useless spread of the disease. The germs may be carried on the shoes or clothing of any one handling the hogs, to herds subsequently visited. Stock cars used for shipping hogs are to be considered cholera infected unless thoroughly cleaned and disinfected, as are also public stock yards. It is dangerous for the farmer to frequent these places and return to attend his own herd without first disinfecting at least his shoes. Show hogs may bring the germs of the disease to the farm upon their return. For this reason they should be held in quarantine at least two or three weeks before being allowed to run with other hogs. Streams of water receiving drainage from infected pens are fruitful ways of carrying the germs of the disease to other herds which receive water from such sources. Wagons often used to carry away dead hogs may be unthinkingly used to haul well and susceptible hogs. Frequently, apparently well hogs are purchased and in a few days begin to show symptoms of cholera. If they have been placed immediately with other hogs, a general outbreak is to be expected. Knowing the source of the cholera germs from the sick hogs, the intelligent use of this knowledge may prevent extensive outbreaks.

General Preventive and Hygienic Measures.

These may include measures to prevent the introduction of hog cholera and also to prevent further extension of the disease. All that is necessary to prevent cholera is to prevent the hogs from coming in contact with the specific virus. Sources of infection should then, of course, be avoided. New stock purchased ought to be held in quarantine at least two or three weeks to give time for the evidence of symptoms should they be infected. Pens should not be located near public roads where hogs may be driven. Care should be exercised in allowing visitors to come in contact with the yards and hogs.

The general health of the hogs must be considered a factor in the prevention or occurrence of cholera. The healthy herd, well cared for, will often resist the disease when other hogs not so well attended will contract it. Clean pens, pure drinking water, clean feeding places, proper feed and care are factors working against infection. Plenty of room, in dry, well ventilated houses for sleeping quarters should at all times be provided. The yard should be well drained.

The lousy hog is more susceptible to cholera because lice weakens the general health of the affected hog. Hogs should be dipped twice at intervals of ten days, every six months. The pens, hog houses and troughs should be frequently cleaned of all litter and refuse, and strong solutions of one of the various dips sprayed upon the premises.

When cholera has already appeared in the herd there is little to be done by treatment with drugs. There is no known specific treatment for the hog sick with cholera. If the money that is spent for the various hog



CALIFORNIA VICTOR (84067).
Poland China Boar Farrowed Oct. 5, 1911.
Owned by M. Bassett, Hanford, Cal.

cholera "cures" that are on the market, went toward improvement of the hygienic conditions and care of hogs there would be less sick hogs upon which to use the "cures" and more money in the pocket of the swine raiser. It seems to be characteristic of a large part of the hog raisers to give a trial to all of the "specifics" that are presented for sale by various companies, instead of applying to the State Experiment Station and State authorities interested in, and working toward, the preservation of the health of animals, for information regarding such products. The State Experiment Station at all times desires and expects to give whatever advice possible.

Hygienic measures are important in checking outbreaks of hog cholera. Dip the well hogs, separate them from the sick and move them to clean quarters at the appearance of the disease. All dead hogs should be burned, or covered with lime and buried six feet deep. It is better to burn because there is then no opportunity for the carcass to be uncovered and infect the premises.

If possible the well and sick hogs should have different attendants, and the utensils of the sick should not be used in feeding the well hogs. Cresol compound U. S. P. (1-20) or strong solutions of dips should be sprayed around the premises after the pens and houses have been cleaned. The liberal use of disinfectants, with perhaps a little in the feed, will do much toward reducing the virulence in the subacute type. It is not advisable to feed the sick hogs on a heavy ration. Feed them slops of some ground feeds. Good range in good weather is desirable, but this infects too large a territory that is difficult to disinfect. After the disease has run its course the infected pens should be again thoroughly disinfected and lime scattered on the premises. White-washing will do much toward destroying the germs.

Fields may be plowed and sowed to some forage crop or they may be left free from hogs for a few months. It is not safe to place susceptible hogs in infected pens within three months after the disease has disappeared, and even then new infection may occur unless the disinfection has been very thorough.



WONDERFUL VICTOR (84071).
A Particularly Good Young Poland Ch
Boar, Farrowed September 9, 1911. Ow
by M. Bassett, Hanford, Cal.

DUROC JERSEYS AT MODESTO

BOARS, SOWS AND YOUNG STOCK FOR SALE.

Registered Duroc Jerseys. No better anywhere. Write for prices. Have stock for immediate delivery. Address:

JOHN P. DAGGS

BOX 5. R. F. D. 5 (One Mile North of Town), MODESTO, CAL.

BERKSHIRES

A grand lot of richly bred pigs of both sexes for sale. Express prepaid. Also a lot of good service boars offered cheap.

A few tried and proven brood sows and bred gilts priced to sell. Satisfaction guaranteed. Write us your needs.

WEAVER STOCK FARM, BRAWLEY, CAL.

REGISTERED POLAND CHINA SWINE

PRIZE WINNERS

Finest Stock in the State from \$30 up

M. BASSETT, Breeder

HANFORD, CAL.

SUNNY SIDE STOCK FARM BERKSHIRES

My herd contains more Champions, more Descendants of Champions and more Parents of Champions than any other herd on the Pacific Coast.

G. A. MURPHY

PERKINS, SACRAMENTO COUNTY, CAL.

Quality Berkshires

We will exhibit at the California State Fair a herd of select Berkshires. We will be pleased to meet old customers, and to show our stock to prospective purchasers.

Oak Grove Dairy Farm, Woodland, Cal.

The Serum in California.

The State serum station, under direction of the Director of the Experiment Station, has been distributing serum practically a year. During that time enough serum has been produced and distributed to vaccinate about 30,000 hogs, which represents about one-twenty-fifth of the total hog population. About 40 per cent of this serum has been distributed free of charge, the applicants coming under the free distribution clause of the State law providing for the preparation and distribution of serum. A resume of the results of the serum for the first year show a history the same as that of the serum in many states during the first, or trial, year of its use. California is one of only three states where the farmers are supplied the serum directly, and are allowed to vaccinate with no other instructions than those which can be written and distributed with the serum. Other states tried this method and have returned to supervision of both the distribution and injection of the serum with much better results. The first year's use of serum in this State has demonstrated it a most valuable product in saving the well hogs in cholera outbreaks. There are some few opponents to the serum, because of apparent failures the serum has given to them. The majority of these cases were to be expected from the handicap given to the treatment. Because a man has "vaccinated for blackleg," or has been a stockman all his life is no particular qualification for the intelligent use and administration of anti-hog cholera serum. Also, the serum does little good in outbreaks of long standing. The coming year will give even better results from serum use than the past, because the product is becoming better understood by men who administer it. They are learning that it is of no value on sick hogs, and its success is not clearly apparent when used in herds where the disease is thoroughly scattered among the hogs. The serum should be used with that understanding in such cases.

Beginning September 1st the cost of the serum will be reduced from 2½ cents to 2 cents. The cost of the serum has been said to be one of its handicaps. Farmers have said that the expense of vaccinating exceeds the loss they would have sustained without treatment. Considering that in average cases 65 per cent of the hogs will die in an outbreak without treatment, the serum has demonstrated a reduction in this mortality to 13 per cent in infected herds when administered in time. On an investment of \$5000 in hogs the saving would be a difference between \$3150 and \$650, minus about \$300 for the cost of the serum. If \$2200 is worth \$300 it pays to vaccinate in time and under proper direction.

Roselawn Stock Farm of Woodland reports the sale of ten Shorthorn bull calves to the Newhall Land and Cattle Company, Santa Maria, Cal. Also three Shropshire bucks to J. F. Dearling of West Bntte, Cal.

If a pig is grown right and fed right there is no time in the life of a pig when he will make any more pork than between 8 weeks and 3 months in proportion to feed consumed.

Pork production as a specialty is just becoming recognized. For many years the hog has, to a large extent, been a by-product of the feed lot wherein beef production was the standby.

Two pastures are better than one because while the hogs are feeding in one field the other will be recovering, and later furnish much more attractive feed than if both pastures are used as one.

A WORD ABOUT THE BACON HOG

The Live Stock and Dairy Journal—There has been an important branch of swine raising that has, up to the present time, been neglected in California. That is the breeding of bacon hogs. In the Eastern markets the hog that always tops the market by a half cent to a cent is the bacon hog. It, therefore, seems strange that here in this State our packers have to ship their bacon green from the East, due to the fact that there are no bacon hogs raised on the coast. There is no reason why we can't raise them here. We have the feed and the demand, the important elements which make swine raising a success.

There are several bacon breeds, but the foremost is the Tamworth. It is from the long, juicy, even-layered sides of this hog that England makes the bacon for which it is famous. The Tamworth is a large, golden red hog, rather high off the ground, with great length and depth of side; long snout with light jaw; ears upright; smooth shoulders; even and slightly arched back, long tail.

They are exceptionally hardy, due to the activeness, and are good feeders. In fact, in a recent experiment at the Utah Station they surpassed all other breeds.

Another strong point is their prolificacy. We have had under our supervision sows that farrowed fourteen and sixteen pigs, and they are capable of raising them, too. One sow we know of farrowed fifty-nine pigs in five litters, and another forty-seven in four litters. Can you beat it?

KENNEDY BROTHERS.

Merced County, Cal.

WILL BE AT THE FAIR WITH POLAND CHINAS.

The Live Stock and Dairy Journal—I have entered several swine in the State Fair, and will be there. The hogs are looking good to me. I have not been able to hold on to enough of my hogs, so can not show in as many classes as I would like, but will have them in several of the classes. Old H's Big Bone (149311) will have a chance to show this year in the aged class. Have not wanted to make him very fat, as he is too valuable a hog to risk injuring by too much fat, but will show him at about 800 pounds.

Several of his get are coming on nicely, and I hope to be able to make some of the old show men at least "take notice," if I do not win prizes.

A. M. HENRY.

San Joaquin County, Cal.

JOHN P. DAGGS BUSY.

John P. Daggs of Modesto, Cal., breeder of Duroc Jersey hogs, will take to the State Fair Daggs' Fancy Colonel II (41237), whose sire was Hoosier Lad (25273), and whose dam was Nameless (61330). He will also show a 10 months old boar, Modesto King (117719), sired by Burke's Colorado King.

Mr. Daggs reports recent sales as follows: Two young sows and three boars to J. K. Fraser of Denair, three sows and a boar to G. W. Adams of Modesto and ten head of young pigs to J. Estrada of Modesto.

Mr. Daggs made entries in all classes at the Turlock Carnival, and will also show at the Stanislaus County fair.

For the month ending July 31st there there were 994 head of cattle and 143 calves from California received at the Portland union stockyards. The report shows that for the year to date there was a decrease in receipts at the yards of 7633 cattle, 1713 calves and 33,651 sheep, and an increase of 10,740 hogs.

Grape Wild Farm ^{HERD} CF Berkshires

Herd headed by:

Double Premier (88215), a son of Premier Longfellow.
Mayhews Masterpiece (134906) and Grape Wild Master (134907), both sons of Masterpiece (77000).
Superior Star (145224), a son of Berryton Duke, Jr.
The sows in the herd are equally as well bred.

STOCK OF ALL AGES FOR SALE

A. B. HUMPHREY Mayhews, California
Farm located eight miles east of Sacramento on Folsom road.

J. FRANK SMITH & SONS

Breeders of
REGISTERED DUROC JERSEY SWINE.

Young stock for sale, out of dams of choice breeding and sired by two great boars, Billie Rosebud, Jr., No. 89729, and Nebraska Sensation, No. 108661. These boars carry the blood of great winners and producing hogs.
All stock guaranteed to be as represented. Address:

H. H. SMITH, Mgr.,

Route No. 1, Box 42.

Hanford, Cal.

Dutch Belted Cattle**Hampshire Swine**

In Dutch Belted Cattle I have the winning herd of America, having won all the important prizes at the National Dairy Show for the last five years. Young stock for sale.

My Hampshire Hogs have been selected with great care and my herd is one of the oldest in America. Herd headed by El Salvator, winner of two silver cups in the strongest competition of the middle west. Fifty young sows and boars for sale. This breed has won over all others in the dressed carcass contest for several years at the International Fat Stock Show.

If interested in the best frigated Valley in the U. S. write for circular.

FRANK REED SANDERS

::

Salt River Valley, Mesa, Arizona

I HAVE 150 DUROC JERSEY HOGS

All eligible to registration, that I wish to sell for \$1500. Have no feed and no time to give them my attention. A number of sows are with pig.

C. L. De Ryder,

Pleasanton, Cal.

CALIFORNIA POLYTECHNIC SCHOOL

BREEDERS OF
HOLSTEIN AND JERSEY CATTLE, POLAND CHINA AND
BERKSHIRE HOGS, PERCHERON AND CLYDESDALE HORSES
YOUNG STOCK FOR SALE

Address Animal Husbandry Department, California Polytechnic School, San Luis Obispo, Cal.

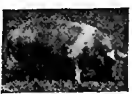
**BELLA VISTA STOCK RANCH**

GUERNSEY CATTLE. HAMPSHIRE SWINE.

Registered Purebreds of Both Sexes for Sale.

J. W. HENDERSON,

503 First National Bank Bldg., Berkeley, Cal.

**FOR SALE--The Herd Boar****Artful Star Master 2d (139,843)**

Farrowed April 2, 1909. Out of Premium Alexis 2d (194723), by Star Master (97071), out of Ulalah Star (59992), by Masterpiece (77000). Premier Alexis 2d, out of Alexis Belle 44th (104296), by Artful Premier (55555).

Artful Star Master 2d is a smooth boar of great bone, vitality and conformation. See him at the State Fair.

For Further Information, Address

GREENFIELDS FARM,

Klamath Falls, Ore.

GRAPE WILD HERD.

Good Demand for Bred Sows—Methods of Feeding—Modern Bath Tubs for the Swine.

The Live Stock and Dairy Journal— The bred sows we advertised in your last few issues are all sold except a few that are now raising litters, and these will be offered for sale when bred for the next litters.

We will exhibit two of our herd boars at the fair, and will also show a fine display of brood sows and some young pigs.

A number of breeders have been writing about feeding skim milk to pigs, with poor results when fed fresh. We have fed skim milk for a number of years, and always feed it fresh from the separator, but mix some grain and water with it. We soak the grain in water from one feed to the other, and then add the skim milk fresh from the separator and feed right away, always with best results. The milk of twenty-five to thirty cows is fed to the sows suckling pigs, and to the weaned pigs. The older hogs get mostly chopped alfalfa, with a little grain mixed. We also feed a good deal of cull fruit, of which the hogs like pears best of all.

Last winter we improved our system of watering hogs by putting in cement ditches throughout the lots, with a basin in each lot for the hogs to lie in during hot days. A small stream of water is running through them continually from a reservoir above. When cleaning the basins, all that is necessary is to pull up the gates, turn on a big stream of water and all will be washed out in only a few minutes.

With best wishes to **The Live Stock and Dairy Journal**, the foremost stock journal on the coast.

C. J. MAURER,
Herdsman Grape Wild Farm,
Sacramento County, Cal.

THINKS POLAND CHINAS BEST HOG IN THE WORLD

The Live Stock and Dairy Journal— I wish to write a few words in favor of Poland China swine. In my opinion the Poland China is the best hog in the world today if bred right and fed right. Enclosed you will find a photograph of California Victor (84067), farrowed October 5, 1911. He is now a little over ten months old, and will weigh very close to 400 pounds. He is not what they call the big type, but I think he is big enough. The Poland China hog, when properly bred and fed, will make more pork when he is eight months old than any other hog for the amount of feed fed. They will also stay inside of the fence better than any other hog, and will keep in better condition with less grain on alfalfa pasture. I have had better success with my Poland Chinas this year than any year since I have been raising them. I have had a great many sales all through the spring and summer. In July I sold 78 head; August 1st I shipped 26 head to Miller & Lux, Kern County, and August 3d I shipped 30 head and W. H. Bernstein shipped 18 head, which made a carload of purebred Poland China swine at one sale to Oxalis to Miller & Lux. I think that is a record breaker. The hogs were all tested for Tuberculosis, and not one of them showed any signs of the disease. This week I shipped nine head to Mexico, being seven sows and two boars. You can very well see why I think so much of the Poland China. I will be at the State Fair again this year. I have several very good Poland to sell yet.

M. BASSETT.

All breeds of hogs look good when taken care of. All of them will yield good money if rightly handled.

FEEDING SKIM MILK AND BUTTERMILK TO HOGS

The Live Stock and Dairy Journal— What price can I pay for skim milk to feed to hogs, with hogs at present prices, and make a good profit.—J. J. Belmont, Cal.

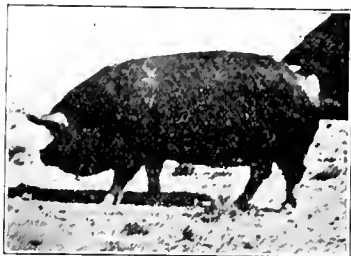
Answer by G. A. Murphy—With the present prices of hogs I believe any one can pay 2 cents per gallon for skim milk delivered at the feed pen. The hauling would cut out the profit unless on a large scale, so that tank wagons could be provided and a man and team kept on the job.

To get best results from milk one must feed about the same amount daily, and have alfalfa pasture and a small amount of grain to complete the ration.

One successful feeder of milk uses what milk he has and gives the pigs one pound each of wheat or barley at 3 months of age and adds a pound each month.

Some feed it warm from the separator, and I believe this method gives best results, unless the pigs are overfed. Unless fed warm it should be well soured. Most large dairies run the milk from the separator to a vat that is never empty, and consequently is always very sour. This method doesn't look right, but the pigs seem to relish it and grow fat, with their trough always filled, and nothing else.

A great deal depends upon the hogs and the man who does the feeding.



JENNETTE LEE.
A Noted Berkshire Sow. Owned by
G. A. Murphy, Perkins, Cal.

Should the hogs be bought, care must be taken not to overfeed until they get used to the milk ration. In buying, best results can be obtained from thin hogs weighing about 100 pounds.

I would advise keeping brood sows and raising the pigs on the milk ration, as in this way there is no change and the milk-fed pigs are much heavier at weaning time than those not having any milk.

The hog with a large frame and strong bone will bring the most profit with the milk ration if fed for rapid gains, as they get so fat at four to six months of age that it is hard for the small boned pig to get around.

Butter milk may be valuable or not, according to the method of handling. I think I could get some butter milk from the creamery that would be worth 4 cents per gallon, but it would have to be the richest. The butter milk that is taken off before any wash water is used is rich, but the other



REGISTERED O. I. C.
Owned by R. A. East, Modesto, Cal.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

decreases in value in proportion to the amount of water added and a great deal might be so thin as not to be worth using.

I have fed buttermilk and was well pleased with results, as the pigs were prize winners at the State Fair. Mine cost me a cent a gallon in Sacramento. I got a barrel full when I took cream to the creamery, and would do so now if I were milking cows. At present it is impossible for me to get it regularly unless I put on a tank wagon, and I do not have use for that much, as too much milk does not make as good breeding hogs as I get with my present method of feeding, although they would have more size.

If the inquirer can get both butter milk and skim milk it would pay him to try one pen with each kind for thirty days, and see which brings the best gains. Use pigs of about the same age and condition of health and flesh.

I believe there is more chance to infect the hogs with tuberculous from the butter milk than with skim milk, but I do not believe the feeder will have any trouble in that way, as it is a slow disease and does not show itself in stock that is sold young. In my experience I have never seen a hog that I had any reason to believe had the disease.

Make a contract at a price so that you can put it into the feed yard at 2 cents or less, and have the quarters fixed up so that they can be easily cleaned and disinfected. Water should be piped under pressure so that it can be used both for washing and drinking.

SALE OF NOTABLE POLAND CHINAS IN KINGS COUNTY

One of the best sales of the year was made on Poland Chinas in Kings County, Cal., when Mr. Wallis of Miller & Lux recently purchased from M. Bassett twenty-five registered sows and twenty-five young registered boars, and from W. Bernstein five young boars and thirteen young sows, all registered stock. These selections by Mr. Wallis reflect great credit upon the Bassett stock, and the placing of them in the herds of the great Miller & Lux herds will result in the breeding of great numbers of the type of Poland Chinas which Mr. Bassett has made so excellent in California during many years of the most painstaking scientific breeding. While Mr. Bernstein is a younger breeder than Mr. Bassett his stock also is notable for breeding, much of the foundation having come from the Bassett herd, and by careful development the Bernstein herd is a credit to the stock from which it came.

This sale has attracted widespread attention to Kings County Poland Chinas, which county, by the way, has supplied many of the foundation herds of California and adjoining states.

Owing to the sale of most of his stock of serviceable age, Mr. Bernstein will not be able to have an exhibit at the California State Fair this year, but in this issue he offers for sale fifty June and July pigs of excellent breeding.

R. R. Cartwright of Angels Camp will be at the State Fair with an exhibit of Red Polled cattle. Mr. Cartwright has an advertisement in this issue. He has several good bulls for sale, and it will pay any one interested to take a look at his stock. The Red Polled are gaining in popularity right along in all sections of the country, and Mr. Cartwright's exhibit will no doubt attract a great deal of attention.

Free range for hogs does not mean that they should be allowed to run over our neighbor's farm.

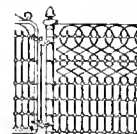


J. L. MCCARTHY

LIVE STOCK AND REAL ESTATE AUCTIONEER

Fifteen years experience at Chicago, St. Louis and Kansas City Stock Yards. Country sales a specialty. Address

Key Route Hotel
Oakland, Cal.



Anchor Yard Fencing

Cheaper than Wood. Artistic Designs. Last Forever. Send for Catalogue.

California Anchor Fence Co.
STOCKTON, CALIFORNIA

Knob Hill Stock Farm

REGISTERED POLAND CHINA SWINE

Stock of Various Ages, Both Sexes
For Sale

A. M. Henry, Proprietor

Farmington, Cal.

S. B. WRIGHT

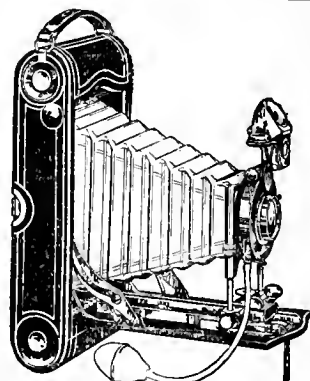
SANTA ROSA, CAL.

BERKSHIRE HOGS, DORSET SHEEP TROTTER HORSES

Breeder of Sonoma Girl 2:05 1/4
Charley Belden 2:08 1/4, etc.

Farm 2 miles west of Santa Rosa on the
Electric Railroad. Fare, 5 cts.

If it isn't an Eastman, it isn't a Kodak.



The quality of your picture depends as much on the simplicity of your camera as upon the quality of its lens and shutter and mechanism.

KODAKS

combine simplicity with quality. There are no annoying details in the operation of the Kodak. Kodaks bear the same relation to a plate camera that the automatic gun bears to your grandfather's muzzle loader. Kodaks are simple, efficient, reliable. They are designed by the most experienced camera makers in the world, are made in the largest and best equipped camera factory in the world, are fitted with lenses of the highest type, each one individually tested both by the lens maker and by our own testers. Kodaks are made by men with whom honest workmanship has become a habit.

There's no dark-room in the Kodak system of picture making. The Kodak is complete ready to use with daylight loading film cartridges—there's no extra investment in plate holders as in the case of a plate camera.

Kodak means photography with the bother left out—means good pictures, real value for your money.

Catalogue free at your dealers or by mail.

EASTMAN KODAK CO.,
365 State St., ROCHESTER, N. Y.

THE CHESTER WHITE HOG.

The Live Stock and Dairy Journal—We are sending you a clipping of an article by G. W. Stauffer, from the White Breeders' Companion, that covers the question, Why do you prefer the O. I. C.? very nicely, and better than we could express it. We should like very much to see this article in your paper.

STUDARUS & CUNNINGHAM.
Sacramento County, Cal.

Following is the article:

The Chester White hog of today needs no introduction, nor need he ever fear of being called upon for an apology for his existence. When it comes to the production of pork at profit, of converting grass and grain into pork he takes the lead.

Their grazing qualities cannot be excelled by any breed, and this means to the farmer a great deal when it comes to actual profit. You will find them quietly grazing and growing fat while others are squealing for something better and growing poor. The argument has often been advanced to us in this way: We used to raise the Chester Whites twenty-five years ago, and they are not what you claim nor what our improved hog of today is. Our answer to this would be: What is the improved hog today to that of twenty years ago? Some of the most popular breeds of today were scarcely known then, and my friends, don't you know that the Chester White has been constantly kept improving with the times the same as all other breeds.

Although the Chester White of our fathers was not the Chester White of today, still he was a famous hog. He was long bodied, with coarse white hair and heavy drooping ears, with a very hardy constitution and kind and gentle disposition. We find him today a hog that comes as near being an ideal as any other breed. He has retained that same kindly disposition, hardy constitution and great assimilating power for which his progenitors were so noted. He is today a symmetrically built hog; he is a hog that will fatten at any age, while at the same time if large old hogs are wanted, where can the hog be found whose feeding may be more profitably protracted? When it comes to the test of the scalding tub they clean up so white that one involuntarily exclaims, "How nice!"

As breeders they rank with the most prolific, mature sows, nearly always farrow ten to fifteen pigs, and as milk givers they are unsurpassed. They have broad, short heads, long, deep bodies, strong, straight backs and heavy hams; they have large heart girth, thus giving them plenty of room for their respiratory organs, and consequently great vitality, which enables them to pass unscathed many of the ill swine flesh is heir to, when others of less vital force must have succumbed.

The purity of the breed is proved in the fact that their property is most marked, which is attested in mating a Chester and a number of other breeds. Crossing them either way produces pigs whose color and characteristics are most decidedly in favor of the Chester; the cross not infrequently producing whole litters of pigs entirely white, even though the one crossed upon is black as night. We think today the Chester White hog embraces more good points than any other breed of hogs.

San Francisco butchers have adopted a rule not to receive dressed beef and mutton from country shippers, and dressed pork will not be received by either wholesalers or retailers. Veal must be shipped in the skin, accompanied by heart and liver.

FIFTEEN YEARS OF CAREFUL BREEDING.

SATISFACTION ACCOMPANIES ALL SALES.

GEORGE V. BECKMAN

Importer and Breeder of Registered Poland-China Hogs
LODI, CALIFORNIA

Herd Boars: Golden Meddler and Randolph.

Residence Phone, 22F14.

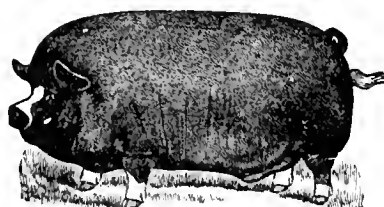
Swine Farm Phone, 43F15.

TAM WORTHS

THE BACON BREED

Pigs for immediate delivery. See our stock
at the California State Fair.

Kennedy Bros. *Amsterdam,*
Merced County, Cal.



BRIGHTON HERD

..... OF

Registered Berkshires

WON SILVER CUP OFFERED BY AMERICAN BERKSHIRE BREEDERS' ASSOCIATION AT CALIFORNIA STATE FAIR, 1911.

I offer for sale twenty head of High-Class Gilts and Boars of exceptional breeding and individually of good type. Sired by such boars as Matchless Longfellow 3d (156708), Dora's Duke (142687), Standard Master 3d and Kennett Lee 3d, and out of such sows as Columbia's Model 3d, Duchess of Willow Creek 3d, Kennett's Duchess and others of equal breeding. This stock is priced right, and can be seen at my place or at the California State Fair. I also have registered Shorthorn cattle for sale.

H. L. MURPHY,

PERKINS, SACRAMENTO COUNTY,

CALIFORNIA.

DIGESTER TANKAGE THE CHAMPION HOG FEED

The following is an excerpt from a letter of a feeder, showing how he values Digester Tankage:

"I have been feeding your Digester Tankage for some time past, and find it all you say it is. At first I thought that I would make a thorough comparative trial on two different grades of hogs, but when I saw the ones fed Tankage gaining so much faster than the other grade, I did not think my pocket-book could stand the loss on the grade not fed Tankage, so that I put them both on the Tankage feed, and they have done better than had I not.

I kept track, however, of a lot of 67 hogs:

67 hogs weighed, on February 17th..... 9,180 pounds

At the end of the first week, not

being fed Tankage, 66 hogs

weighed..... 9,775 pounds

1 sold one hog, weight..... 160 pounds 9,935 pounds

A gain of..... 755 pounds

Gain per day..... 108 pounds

Gain per day per hog..... 1.63 lbs.

At the end of the next week, being fed on

Digester Tankage, they weighed, on March

2d (66 hogs)..... 10,960 pounds

A gain in seven days of..... 1,025 pounds

Or a gain per day of..... 147 pounds

Or a gain per day per hog..... 2.22 lbs.

"I notice that Digester Tankage makes the hogs put on more fat per pound of feed fed them, and they had a much better appetite, and were smoother looking than hogs we previously fed without Digester Tankage."

Our representative will be at the State Fair, in the tent between the Poultry and Hog exhibits, and will be glad to talk with anyone interested in hog feeding.

WESTERN MEAT COMPANY

SAN FRANCISCO, CAL.

SHAKE HANDS

U

KNOW

We Make

Made-to-Measure

Tailored Suits From

\$20.00 UP

For Men and Women. Express charges prepaid. Money refunded if not satisfactory.

Write or call for samples and measure blanks. Credit if desired.

Bell Tailoring Co.,

1010 EIGHTH STREET,
Sacramento, Cal.



SPEND

Admission Day in Stockton

**STATE FAIR
SACRAMENTO**

Saturday, Sept. 14

TO

Saturday, Sept. 21

INCLUSIVE

The TRACTION Trains and their
Sacramento City Cars

LAND YOU RIGHT AT THE GATES

SPECIAL RATES

From all our Stations

**Central California
Traction Company**

No man that is inexperienced should undertake the business of raising hogs unless he expects to make a study of it, and to profit by his mistakes.

Young pigs are so partial toward foods rich in protein that they will acquire an excess of that element if given an opportunity, thereby stunting their growth.

With good fence wire as cheap as it is today it is an easy matter to divide up the hog pasture into convenient lots.

Power on the Farm

CARE OF GAS ENGINE BATTERIES

Gas engine users who want the best battery ignition, do not use only five batteries in series as is commonly done, but use what is known as the "series multiple" arrangement in which four groups, five in a group, are used. When twenty cells are so arranged their life is eight times that of five cells. But even with this arrangement the battery will give trouble sometimes, as regardless of the number or kind of batteries used, or their arrangement, batteries become exhausted with age, even if not in use.

It will be well to remember that a battery will not give a uniform spark all day. In the morning, when the engine is first started, the spark may be entirely satisfactory. In the afternoon, after the engine has run several hours and the batteries begin to weaken, the spark weakens and the engine begins to miss. This means that the batteries are getting weaker. Do not attempt to remedy this trouble by adjusting the engine igniter, but give the batteries the attention they demand.

Rough treatment tends to shorten the life of batteries. Handle them gently. Do not remove the pasteboard covers.

Excessive heat shortens the life of batteries; cold makes them inoperative until thawed out.

Don't keep batteries in a hot place. Don't lay them on sides, but always stand on end. Don't buy so many that you will have to keep them on hand for months. Get new, fresh cells as needed.

Slow-speed, engine-timed, built-in magnetos are an up-to-date device for the gas engine. They are independent of heat and cold. As the magneto forms part of the engine, it will run anywhere and give a good spark as long as the engine runs. The "built-in" type of magneto should always be specified on engines to be used for portable and farm work, as they are entirely independent of the many conditions which so seriously affect battery ignition. Magneto ignition is always uniform, as it depends upon the engine power and not chemicals, for its generation. The best magnetos have means for visibly timing them, so that any one can readily determine if the engine is properly in time.

BUREAU OF FARM POWER.

Henry T. Rainey of Illinois has introduced a bill in Congress providing for the establishment of a Bureau of Farm Power. Mr. Rainey contends that such a bureau would accomplish a great deal of good for the farmers of the country.

The bill provides:

"That it shall be the province and duty of said bureau to investigate and report to said department upon all matters pertaining to methods of furnishing power on farms, and all labor-saving machinery adapted for use on farms, and the use of electricity, gasoline and steam in propelling farm vehicles, in operating plows, reapers, mowing machines, thrashing machines and other machines and implements used in planting, cultivating, harvesting and marketing corn, wheat, oats, potatoes, hay, rice, vegetables and all other agricultural products.

"It shall be within the province of said bureau to make diligent investigations into the matter of machines and labor-saving devices used in the dairy industry as conducted on farms and into the methods of heating and lighting all farm buildings. In gen-

eral, said bureau is authorized and directed to diligently investigate all machinery, methods and devices which will lessen the amount of labor necessary in agricultural pursuits and lessen the expense of producing and marketing such of the necessities of life as are produced on farms, and to report the results of said investigations to said Department of Agriculture."

ELECTRICAL POWER.

There is no power that can be used on the farm or anywhere else that is so economical and so easily handled as electric power. Fortunately, indeed, is the farmer that has electric power at his disposal. The Pacific Gas and Electric Company, whose splendid service covers many portions of California, is running a series of advertisements in this paper, and it would be well for farmers who are within reach of their power lines to ascertain the particulars regarding "Pacific service."

ARIZONA NOTES.

The total state valuation of Arizona this year will be approximately \$160,000,000, as against \$100,000,000 last year. A great percentage of this increase is due to improved agricultural conditions brought about by irrigation and scientific methods in dry farming.

Artesian water is being developed in numerous sections of the state, good wells having been secured in Spring, Verde, Rillito and Maricopa Valleys.

Forest lands to the extent of 106,540 acres were recently transferred to grazing land. This has proved a great help to the cattlemen, who report ranges in fine shape and cattle in excellent condition.

The spring shipments of live stock from Gila County totaled 18,000 head. Williamson Valley, Yavapai County, shipped 3000 head in two weeks. Shippers at the points expect shortly to secure lower freight rates to California points.

The spring rains in the mountains added to the stored water in Roosevelt reservoir until there is now stored behind Roosevelt dam a supply of water sufficient to irrigate the entire district in the Salt River Project for two years.

Salt River Valley shipped over two thousand cars of diversified products of the land during the month of July. The crops included in the list range from honey to cattle.

The citizens of Phoenix are pledged to raise \$7500 for the coming Arizona Fair, to be held in Phoenix October 28th to November 2d.

Harry S. Baird has been appointed to a position on the staff of the dairy division at the State Farm at Davis. Mr. Baird comes from the Kansas State Agricultural College.

There is no place where a kodak is more needed than on the farm, especially where the higher classes of stock are bred, as photographs are often desired for various purposes. The Eastman Kodak Company has a new advertisement in this issue. Write it for literature.

E. Blanchard of Denair, Cal., writes *The Live Stock and Dairy Journal* that he has a 2-year-old Guernsey heifer, "Beauty," that gives 39 pounds of milk daily.

The Turlock Show

(By S. J. Strauss.)

The Turlock Melon Carnival and Live Stock Show, August 21st to 24th, was a big success. The dairy stock display was especially good this year. L. J. Dobler, W. J. Hackett, F. M. Dimock, W. A. Bradley, T. W. Cheney and Dr. Hodges are a sextette of Jersey breeders that are a credit to the Turlock Irrigation District. Frank Hatch of Ceres had everything pretty near his own way in the Holsteins, while J. K. Fraser annexed the Duroc Jersey swine ribbons and cups. Messrs. Dobler, Hackett and Fraser will show at Sacramento.

Lindquist Brothers are breeders of Durocs who made their initial showing this year, and they took first on young boar. R. J. Johann had an unusually good Poland China brood sow on display, and his Percheron stallion won a first prize.

Turlock did itself proud this year. Thousands of melons were given away, and the entertainment and side show features were ably handled by Messrs. Foley and Burke of San Francisco. The judging of the live stock by Professor F. R. Marshall of the State Farm, aided by C. R. George of the same institution, was a big feature in the educational value of the fair. During the course of the awards Professor Marshall discussed the various points considered in judging animals, and his remarks were of much interest and value.

Mr. George judged the Jersey heifers, which was a good show, eight babies going to the post. His lecture on the conformation ad type of these animals was much appreciated.

R. J. Johann of Turlock, breeder of horses and Poland Chinas, deserves a great deal of credit for the perfect arrangements and numerous entries in the live stock division of the show.

Following are the awards:

Swine.

Poland China hogs—First boar, S. T. Steffy; first on pigs and sow with pigs, S. T. Steffy; first on sow, R. J. Johann.

Berkshires—Second on boar under 1 year, Annette Entrica; first on boar under 1 year, H. A. Dubois; first on boar, aged, A. J. Eddy; first on sow under 1 year, A. J. Eddy.

Hampshires—U. G. Strader, first and second boar and first and second sow under 1 year.

Durocs—Aged boar, J. K. Fraser, first and second, and sweepstakes for boar. Lindquist took first on young boar. J. K. Fraser, first on aged sow and sweepstakes on sow, and first on sow under 1 year, and second on boar under 1 year; Lindquist Brothers second on sow under 1 year.

Dairy Stock.

Holsteins—Cows, 3 years old, Phil Rutherford, first; 2-year cow, Frank Hatch first, cup, 1-year-old heifer, first prize.

Bulls—James Galno, aged bull, first; J. B. Yost, aged bull, second; J. H. Borden, yearling bull, first; J. K. Fraser, bull calf, first.

Jerseys (aged bulls)—L. J. Dobler, first; William Smith, second; 2-year-old bull, F. M. Dimmick, first; yearling bulls, W. J. Hackett, first; W. A. Bradley, second; Dr. Hodges, third; Phil Rutherford, fourth.

Jersey (bull calves)—L. J. Dobler, first; W. J. Hackett, second; aged cows, F. M. Dimmick, first; W. A. Bradley, second; W. J. Hackett, third and fourth; 2-year-old heifers, L. J. Dobler, first; yearling heifers, W. J. Hackett, first; W. A. Bradley, second and third; L. J. Dobler, fourth.

Heifer calves—W. J. Hackett, first and second.

Graded cows—K. Manyak, first and second, and first on heifers.

Dutch-Belted cows—Mrs. U. G. Stra-

der, all prizes.

Percheron Stallions—William Collier, sweepstakes champion; R. J. Johann, first prize and A. J. Johnson, third prize.

There was a very large showing in fancy driving horses, saddlers, grade mares, sucking colts and draft colts, in which the competition was very keen.

A CALIFORNIA FARMER'S EXPERIENCE IN PASTURING ALFALFA.

(From the River Rambler, Los Molinos, Cal.)

Does pasturing hurt alfalfa?

That seems like an absurd question in the face of the long accepted theory of experts and practical farmers which says emphatically that pasturing is extremely harmful.

It is possible, however, that this theory is based on experience with alfalfa in sections of the country where the plant is not so hardy and rank as in the deep Los Molinos soil and warm, dry California climate. At least John Rissi's experience tends to show that there may be exceptions to the pasture theory.

Mr. Rissi has about forty acres in alfalfa. Just back of his house is a five-acre tract which he cut one time last year and pastured during the rest of the season. From April until December—in fact, until spring—Mr. Rissi had his entire dairy herd, consisting of thirty cows and young stock, six head of horses, and about forty head of hogs, large and small—or seventy-five head of live stock all told—ranging on this five-acre tract. With the exception of a little hay fed to the milk cows morning and night, all this stock subsisted on this five-acre patch of alfalfa.

Of course, the fact that so many animals could be kept on so small a tract excited much comment. It also inspired a great deal of criticism from the wise ones, who insisted Mr. Rissi was certainly killing his alfalfa. And to look at the way the plants were eaten down until the ground was almost bare seemed to justify the criticism.

This year Mr. Rissi did not pasture the five-acre tract, but instead fenced off a small tract in another field, where he is ranging his stock.

The five-acre tract, which, according to all theory, should be patchy and half killed out, is not only the best stand and the heaviest alfalfa on the place, but the heaviest Mr. Rissi has ever raised. He declares it is the best alfalfa he has seen in the district, and believes his third cutting will run three tons per acre.

"I am convinced," said Mr. Rissi, "that where the soil is light, as mine is, and care is exercised not to let the ground be trampled when wet, pasturing does not injure alfalfa, while the fertilizing which results from it is a great benefit.

"One important improvement I noticed and which I attributed largely to the land having been pastured: The first cutting on this five-acre tract was just as free from weeds and grass as the later cuttings usually are."

S. J. Strauss, known throughout the State as the "Dairy Kid," and an energetic field representative of *The Live Stock and Dairy Journal*, has charge of compiling and issuing the premium list for the Stanislaus County exposition. Mr. Strauss has had wide experience, and his services have been of considerable value to the various committees in charge of the fair arrangements.



SHEEP



A Review of the Sheep and Wool Situation

How Various Authorities Regard the Present Conditions

The Boston Wool Market.

Since the passage of the La Follette wool bill by the Senate, buyers have operated a little more conservatively in the Boston wool market. Generally speaking, trading for the week has been of slightly less volume than for the previous week, yet transactions involving in the neighborhood of four and a half million pounds, territories comprising the greater portion of this movement, are reported.

As the week comes to a close, however, there is a feeling throughout the market that there will be little more uneasiness felt on account of this bill, and that it will, in the terms of one member of the trade, "die a natural death." Whether the bill is passed or vetoed by the President, both wool dealers and manufacturers would like to see it settled and out of the way. That there is good business in store all are inclined to believe, and the tariff seems to be the only stumbling stone in the way. Some dealers are so optimistic regarding the future they say if this bill should find its last resting place at this time, or in other words, be vetoed by the President, the wool market would see conditions more satisfactory than for many years past.

Generally speaking, the range of values at which transactions have been made in this market this week has been no higher than for the past fortnight, although one house reports some transactions at slightly advanced figures. But that prices are to be still further advanced there is little doubt. There may be some who think the highest point has been reached, but when it is taken into consideration that on the first day of August there was less wool in Boston than for a long time and that but small quantities now remain in the West, prospects of advances are not nearly so remote.

Buyers have now pretty well completed their buying in the West, what small amounts now remaining being held at the full range of values and offers of a fraction less than holders' ideas fail to bring out their stocks.

While buyers have not shown the desire to purchase since the wool bill was passed by the Senate, there have nevertheless been some good sized transactions this week. The latter part of last week and the first day or two of the current week saw but little activity, everyone spending most of the time discussing proceedings at Washington. But as the week grew older the effect wore off more or less, and attention was again paid to purchasing and selling wool.

From Sydney, Australia, cables on Wednesday stated that at the sale of wool there about 80 per cent of the offerings were disposed of. The market was firm, but offerings were not of the very best quality.—Commercial Bulletin.

Increased Production in Australia.

Australia is turning out more wool than ever, and the fact is the more astounding when it is remembered that the Commonwealth is carrying several million sheep less than was the case in 1891 (which was the maximum year of its sheep stocks), yet the exports for the last year exceeded the total for 1891 by over 650,000 bales. Here we have a fine commentary on the difference in the character of the sheep which are being bred today in Australia. Some of the most experienced in connection with the pastoral life of the country are of the opinion that this aspect of the case has not received the attention it deserves, for statistics prove that the main factor in increasing the yearly shipments is the increased size of the Australian sheep, and the larger weight per head which is being shorn. It has been reliably estimated that Australian sheep are yielding 50 per cent more wool today than was the case twenty years ago.—The Wool Record (England).

The Wool Bill.

The La Follette wool bill, which was passed by the Senate recently in preference to the Penrose bill and the wool bill passed by the House, was rejected by the House and returned to the Senate without request for a conference. The La Follette bill is the same as that passed at the last session of Congress and vetoed by the President. The probability is that no bill revising the wool schedule will be passed by the present session of Congress and receive the signature of the President. Schedule K, together with other tariff measures, is being used basely by each political party in an effort to get the other party in the hole. Those whose livelihoods depend on the sheep business have every reason to be "riled" over past actions of our legislators, and it is their just due that Schedule K be settled, and then let alone.—National Stockman and Farmer.

Prosperity Is Coming.

It is only natural that those interested in sheep breeding should take the most charitable view possible of

the serious condition the sheep business has been in for quite a while past. The truth is the sheep business has been in a most deplorable condition. As we have always pointed out we need a high tariff on wool and one that is effective (and it is questionable if we ever had one) but in the face of this we contend that the law of supply and demand, a scarcity or a glut, the manipulations of the wool trust and the packer, a false application of politics by sheep raisers to their business has more to do with the welfare of the sheep breeder than any tariff that has ever existed or ever will exist. We have long thought that a bare market and record prices is a great thing for the packer and a poor thing for the mutton maker because a bare market and record prices are an incentive to heavy shipping which means that the packer buys at his own merciless price and packs away in his cold storage rooms low price mutton carcasses which he can hold until they make him a very heavy profit. But with the manipulations of all the powers that be the sheepman is going to have an unprecedented era of prosperity, and that before long.—The Shepherds' Journal.

Supply and Demand.

Somebody has waved the bloody shirt to deprecate the election of Wilson as President on the ground that it might have a depressing effect on the wool trade. As a matter of fact it will not matter much what Governor Wilson's opinion on the tariff is or what he might advocate if elected to the presidency. The price of wool is almost as high in free-trade Europe as in America, so we can not see how a reduction in the tariff would affect the price very much, if at all. The wool business as in all others nowadays is influenced almost entirely by the old law of supply and demand. The trouble, however, is that there is no way to regulate the supply to fit the demand. An increase in sheep breeding follows no general rule, but is due to the weather, the grass or variety of causes. The increase is likely to be greatest when the demand is most reduced by hard times. The fencing laws of some states has driven many flocks off the Western ranges, while the forest reserves have throttled the industry to such extent that it will never again look the same. We are a great people, but we do not know what ails us when we allow such things to go on.—Denver Field and Farm.

AN OPEN LETTER FROM SECRETARY WADE TO SHROPSHIRE BREEDERS.

Now that the season of fairs and exhibitions approaches the sheep breeders should begin to make arrangements to organize state associations, not, of course, recording associations, but something to protect the interests of Shropshire breeders.

Make it a point of personal business this year to attend your State Fair and, if your state has not already a Shropshire association, or a Shropshire division of the State Breeders' Association, this is the time to get your men together and organize.

No matter how small your flock, or how little your Shropshire business interests, you can improve and will increase both by becoming a member of such an organization.

If you go to the fair with the matter well in mind, you will have little difficulty in organizing if your state has no such association. We would suggest that after appointing a temporary chairman, you at once appoint a committee to draft Constitution, By-Laws, Rules, etc., making all as brief as consistent with conditions. Before the date of the fair you can jot down a few suggestions which may prove valuable to your committee and save time as well. Your Constitution and By-Laws will include object, name and location, officers and their duties, meetings, elections, members and amendments.

Under the heading "Members" you should frame certain protections of members against fraudulent dealing of other members. Also provide against mistreatment of a member by any Shropshire dealer who is a member of another state association, arranging that the organizations of the two states shall act upon such cases. Should the two state associations prove unable to conclude the matter, then the Secretary of our American Association should be appealed to.

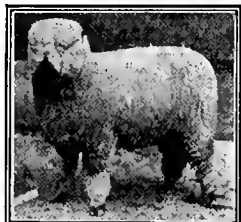
In any case where a member shall invite suspension or expulsion from his state association a report of the case shall at once be sent to the Secretary of the American Association.

The co-operation of your state association and the American Association means success, not only to the Associations but to the Shropshire breed of sheep.

J. M. WADE,
Secretary Shropshire Association.
Lafayette, Ind.

San Ramon Shropshire Flock

PUREBRED AND GRADE RAMS ALSO EWES, FOR SALE. INDIVIDUALS OR CARLOAD LOTS.



First Prize Ewe Lamb at Omaha

BISHOP BROS.

Mention the Livestock and Dairy Journal When Writing to Advertisers.

We will sell 120 Grade Ewe Lambs originally selected for our own breeding flock. All by imported rams out of ewes from which we sell our grade rams. We consider them the best lot of grade ewes we ever had. They are fat and in fine condition. Owing to shortness of feed we will sell them at a very low figure.

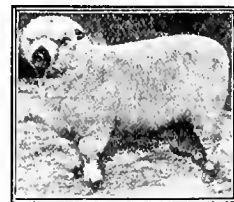
Our grade flock at the State Fair, 1911, took every first and championship.

PRIZES WON BY FLOCK, 1911.

California State Fair—Thirteen out of fifteen first prizes and all of the four championships.

Omaha—First and second ram lambs; first and third ewe lambs.

Our grade rams are raised on the open range.



First Prize Ram Lamb at Omaha

San Ramon, California

RULE TO GOVERN THE FITTING AND EXHIBITING OF MERINOS.

The Live Stock and Dairy Journal—
The following national ruling to govern the fitting and exhibiting of Merinos at state and county fairs and expositions of every description where Merinos are shown in the United States has been made and adopted by the Board of Directors of the American and Delaine-Merino Record Association, to go into effect 1913:

Rule 1—Sheep must be owned by the individual or firm making the exhibit, and must be registered in the accredited records of their respective breeds. No entry accepted unless accompanied by record number, with seal and Secretary's name properly signed.

Rule 2—Sheep eligible to compete must be closely and evenly shorn on or after March 1st, with lambs weaned within the year shown, and sheep that have been oiled, singed, colored or jar hairs removed from the wrinkles shall not be eligible to enter for premiums.

Rule 3—Rams 3 years old or over to compete for premiums must be the sires of recorded lambs as shown by the records, and ewes 4 years old and over to compete for premiums must have living progeny to their credit, as shown by the records, with Secretary's certificate.

Rule 4—The judge will be required to carefully inspect the sheep to see that they comply with the conditions here given, and carry out all instructions to the letter.

Rule 5—Any exhibitor who fails to comply with the conditions here approved, or misrepresents his sheep in any way, in connection with fitting and exhibiting, will forfeit all his premiums.

S. M. CLEAVER,
Secretary American and Delaine-Merino Record Association.

BAD UDDERS IN EWES.

W. R. Gilbert, an experienced shepherd says:

"A thing which often causes the shepherd a great deal of trouble is the ewes having bad udders. This principally occurs in cold, windy weather and sometimes through lambs biting the teats when the ewes refuse to let them suck. Unless attended to soon, this causes the death of the ewe. When examined the udder will be found to be hard and often very much discolored. It should be milked as clean as possible and then fomented with warm water, not hot, to cause unnecessary pain to the ewe. There are many different mixtures for rubbing the udder with, and nearly every shepherd has his own way of treating it. Personally I like linseed oil and turpentine mixed in equal parts, well rubbed into the udder after fomenting. Though we do all we can in a bad case, a ewe will more often die than recover, and ewes that do recover should never be bred again, but should be fattened and sold to the butcher."

Every flock owner of long experience in handling breeding ewes fully realizes that the condition of ewes at mating has a decided influence upon the breeding qualities of both ewes and progeny.

The future of the mutton crop depends upon the attention given the young lambs, and the degree to which they are kept growing from the start.

THE SHEPHERD'S

If you want to buy, sell, or learn how to properly care for sheep or goats you need this beautiful publication; the best in the world. Only fifty cents a year. Free sample copy to those mentioning this publication. **Agents Wanted.** Address, 310 Monadnock Building, Chicago, Illinois.

JOURNAL

ADVERTISING LIVE STOCK.

The direct returns from advertising purebred live stock are great, as many will testify. There is, however, another advantage. Advertising which results in sales is beneficial to the home trade because it establishes reasonable prices and stimulates the home demand. Farmers in the advertiser's neighborhood hear of the prices which the latter receives for his animals and of the frequent shipments which he makes, learn to appreciate the value of his stock, have their eyes opened to the possibilities of purebred stock breeding and become enlisted in it themselves, willing to pay just prices for their foundation stock. In time instead of there being one breeder or a few scattered ones there is a community of breeders, the demand for whose stock is increased to the car lot basis. A few communities have thus been developed within the confines of our own state, and others are now being rapidly developed in a similar manner.

Increased financial gain, however, is not, and should not be, the only advantage to be derived from the live stock advertising. It should give deserved prominence to the farmer, his community and his occupation, and this it does when properly combined with intelligence and enterprise.—Wisconsin Agriculturist.

Will S. Browning of Yolo County has bought the splendid Poland China swine herd of Dr. B. F. Clark, the foundation for which was brought to this State from Ohio. Dr. Clark's Poland Chinas had a reputation in his own neighborhood, but were practically unknown in other sections of the State. Mr. Browning expects to give the purebred swine business a good share of attention, and by advertising and exhibiting at the fairs will let the farmers know what he has.

PREPARING WOOL FOR MARKET

The Live Stock and Dairy Journal—
Could you give a new subscriber a chance to read a good article on how best to prepare wool for the market so that the grower could get a better price for his product? Would it not pay a man with, say, 1000 sheep to arrange to wash or clean his wool before shipping?—W. N. S.

Answer by Thos. Deuigan, Son & Co., wool buyers, San Francisco—Answering your questions in detail, we would say that it would not pay a man, at a large expense, to prepare for washing and cleansing his wool clip in California. In countries where they have green feed most of the year and clean ranges, it is frequently done, but we do not think it would pay in California, where the summers are so dry, and where the wool comes to market so full of burrs, seeds and other stickers. Washing would not clean the wool of this kind of substance.

We cannot give you a long article on how best to prepare wool for market, and can only say with reference to it that a man should handle his wool with a view to making it attractive, and keep out all dirt and offensive matter, such as tags, corral sweepings and evidences of corralling from every fleece before it is packed. In other words, wool is like every other commodity seeking a market—it should be handled with the greatest care, and with a view of putting it up in such a manner that the owner and shipper can congratulate himself upon having left nothing undone that would add to the merits of the clip.

If the sheep are kept on the pastures too late, they will eat right down into the roots and do more harm than grass will do them good.

HILLCREST STOCK FARM

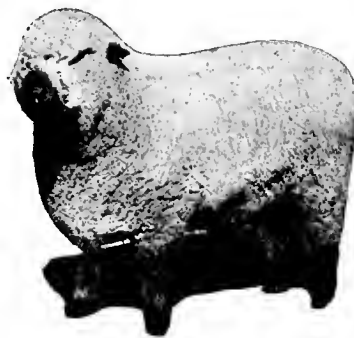
DAVIS, CALIFORNIA

T. S. GLIDE, Prop.

Breeder of

SHORT-HORN CATTLE

SHROPSHIRE and MERINO SHEEP



HILLCREST LAD
First Prize Ram at State Fair, 1911

OFFERS FOR SEASON OF 1912
AN EXCEPTIONALLY FINE LOT OF
PURE-BRED AND REGISTERED
RAMS, YEARLINGS AND TWO-
YEAR-OLDS.

Wool, Hides, Grain, Dried Fruit, Dressed and Live Poultry Wanted

For the best results and to get the most money out of your different kinds of Produce, ship the same to us. Highest market prices and immediate cash returns guaranteed. Send us samples before selling elsewhere. Liberal advances made. Mark and consign your shipments direct to

W. C. PRICE & CO.

Paid Up Capital, \$50,000.
Established 1876.

213, 215, 217 CLAY STREET

SAN FRANCISCO

Frank A. Mecham

Breeder and Importer of

Shropshire, Rambouillet

AND

American Merino Sheep

RED POLLED BULLS FOR SALE

Take electric car at Petaluma or Santa Rosa for Live Oak Station.

Address,

FRANK A. MECHAM,

Petaluma, Sonoma Co.,

Phone Rural 166

California

CHAS. A. KIMBLE

Breeder and Importer of

RAMBOUILLET AND AMERICAN MERINO SHEEP

Correspondence Solicited
Orders Promptly Filled

Phone Sub. 5004

MANFORD, CAL.

SHROPSHIRE RAMS

50 Yearlings 75 Lambs

Splendid Individuals at
Reasonable Prices

G. K. SWINGLE, Davis, Calif.
Phone Davis 406

SHROPSHIRE RAMS

140 Head of Yearling Shropshire Rams.

150 head of Ram Lambs.

These are all of my own breeding, and the choicest lot I have ever had.

Also Duroc Jersey Hogs.

ENTERPRISE FARMS

H. P. EAKLE, JR., Prop. (Phone, Res. 1801.) WOODLAND, CAL.

University of Nevada

RENO, NEVADA.

Breeders of

Percheron Horses.

Holstein-Friesian, Jersey, Aberdeen Angus and Hereford Cattle.

Shropshire, Hampshire, Southdown, Dorset-Horned, Rambouillet and Cheviot Sheep.

Berkshire and Poland China Hogs.

Correspondence Solicited.

Irrigation With Well Water

According to E. G. Linscott, who writes a letter to the Davis Enterprise regarding the subject of irrigating by means of well water, this method has advantages over the ditch system. Mr. Linscott says:

Water for irrigation is money. Why? Because you can increase your crops from 50 to 200 per cent economically by means of water properly applied to your land. If your income is from your crops, then you can increase your income, and income is money.

There are two ways by which you can get water on your land. One is by the ditch system, the other by wells. A great many of you have been told that the ditch system is the cheaper, even though it is not entirely satisfactory. On this point we take issue. It is not cheaper than wells. The first installation of the well and pump, together with the power, is no more than what the ditch company in your county recently asked you to put up per acre for the ditch system by which to irrigate your land.

The ditch system is the greatest distributor of foul seeds known. The weeds which grow rank and in abundance along the banks of the ditch drop their seeds into the water and are thus carried out on the land. There are places in California under the ditch system where the farmers have had to take up their alfalfa fields every three or four years in order to destroy the weeds, the seeds of which were brought in by means of ditch water. Having your own well and your own ditches you can guard against the weeds.

The ditch systems throughout California have had a shortage of water at some time or other, and the crops have had to suffer. This year's shortage is one of the greatest examples of this, and has been a lesson and is a lesson to all people who have land to irrigate. With a water well you can have water whenever you want it, and all that you want, and do not have to let your crops suffer while you are waiting for some one else to finish irrigating.

It has been demonstrated throughout Yolo County that there is an abundant supply of water obtainable from water wells ranging in depth from 100 feet to 200 feet. From our experience we know that by going deeper a better and more permanent supply can be had. Wells ranging from 100 feet to 300 feet in depth should be put down and cased, in your county, for \$2.50 per foot. Taking as an example a 200-foot well, it would cost about \$500. If your water is at a shallower depth, then your expense would be less.

For the installation and operation of a small plant the cost of installation would be as follows:

200-foot well, about.....\$500
5-h.p. motor in S. F., about..... 210
7-inch centrifugal pump, about..... 150
Installation, about..... 50

Total installation of plant.....\$910

A 7-inch centrifugal pump under a 20-foot lift, with 11-horsepower will throw 1200 gallons per minute. Allowing a due amount for evaporation this amount

in 1 hour will cover 1 acre 2.54 ins. deep, costing 26 cents for power.
in 10 hours will cover 1 acre 25.4 ins. deep, costing \$2.60 for power.
in 10 hours will cover 5 acres 5.08 ins. deep, costing \$2.60 for power.
in 920 hours will cover 460 acres 5.08 ins. deep, costing \$240 for power.
in 920 hours will cover 60 acres 38.94 ins. deep, costing \$240 for power.

Thus, by electric installation, and using electric power, the cost of this total pumping would be \$240, the minimum yearly charge.

This amount of water, 1200 gallons per minute, will easily irrigate sixty acres of alfalfa in one season, pumping 920 hours, if properly handled. This is not the greatest amount of water you can get, for you can use more power and get as much more water in proportion.

The installation of a larger plant, using 50-horsepower, will cost for power 1½ cents per kilowatt hour, or \$0.559 per hour. With 50-horsepower you can pump

in 1 minute 5454 gallons,
in 1 hour 327,240 gallons, will cover 1 acre 11.55 ins. deep, cost \$0.559.
in 10 hours 3,272,400 gallons, will cover 10 acres 11.55 ins. deep, cost \$5.59.
in 429 hours 140,385,960 gallons will cover 160 acres 31 ins. deep, cost \$240.
in 1200 hours 392,688,000 gallons will cover 160 acres 86 ins. deep, cost \$670.

BEEF SHORTAGE ACUTE.

Enormous Shrinkage in Volume of Beef Supply, Weight Considered.

A revolutionary change has occurred in live stock trade during the first half of 1912. A long advertised beef scarcity has reached an acute stage. The public is having an opportunity to realize that beef is no longer cheap, not even available at a reasonable price. During the first six months of the year six leading Western markets received but 3162 cattle, against 3,572,000 during the same period of 410,000 does not tell the deficiency story with sufficient emphasis. Cattle have reached the butcher averaging about 200 pounds less than in the days of beef plentitude ten years back, so that the shortage in product is equal to more than a half a million cattle of normal weight.

Chicago territory has been less severely affected than that adjacent to Missouri River markets. Six months' receipts here are 1,282,000, a decrease of only 81,000, compared with 1911, but Kansas City received during the same period but 660,000 head, or 160,000 less than last year. Omaha's six months' cattle run is but 425,000, or 65,000 less than in 1911. Every market in the country exhibits a corresponding supply decrease except Fort Worth, Texas, which has had the benefit of heavy Mexican imports. Beef scarcity is no longer a theory, but a hunger-producing fact.—J. E. Poole, in Live Stock World.

William Bond of Newark, Cal., recently sold to H. L. Murphy a fine young Shorthorn bull, and to Dan Bagley, Jr., the excellent 10 months old bull calf Newark Bondsman, sired by Nonpareil King, he out of Noble Lady by Noble Knight, Newark Bondsman's dam is Clover Leaf 4th. The breeding of this bull appears rich enough to satisfy any breeder.

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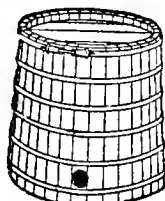
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VETERINARY

We cordially invite the readers of *The Live Stock and Dairy Journal* to consult this department. Questions will be answered free by mail, and a stamp should be enclosed for return postage. Give age, color and sex of animals, with full details of symptoms and conditions and previous treatment, if any.

The Live Stock and Dairy Journal—I have a well-bred Shorthorn heifer that has large sores coming out in patches on her body. What is the cause of them?—F. H. M., Klamath Falls, Ore.

Answer—While your description of the symptoms is not very clear, the trouble is very likely erythema, the causes of which are many and often obscure. However, the most common cause is improper feeding, close stable, etc., which produces a heated condition of the blood and is usually found in fleshy animals.

The Live Stock and Dairy Journal—I have a 7-year-old mare that has a sort of a thin skin growing over one of her eyes. She seems to be able to see a little out of this eye and it does not run. I have used burnt alum on it some, but without result. What can be done for her?—M. P. B., Marysville, Cal.

Answer—The growth should have surgical treatment at the hands of a competent veterinarian. Don't use irritating powders on the eye, as they do no good and only cause the animal distress.

The Live Stock and Dairy Journal—I have an 8-year-old horse that carries his tongue out of his mouth about half the time. How can it be remedied?—N. E. G., Niles, Cal.

Answer—Have his teeth dressed and see that the bridle bit is of a comfortable kind and properly fitted.

The Live Stock and Dairy Journal—Please give me a treatment for a pony that has founder. A veterinarian said it was water founder. It seems to come on by spells and affects the front feet.—J. N. M., Fresno, Cal.

Answer—See that the hoofs are trimmed to natural length, and do not allow the soles to be cut thin. Apply the following blister around the tops of the hoofs: Pwd. Spanish fly, 1/3 oz.; lard, 2 ozs. Give one teaspoonful of nitrate or potash twice a day in bran mash or drinking water for three or four days.

The Live Stock and Dairy Journal—I have a Cleveland bay mare, 9 years old, that has had a cough for two years. She coughs only when on dry feed. The first time I noticed her coughing was after she had been eating burr clover hay, and she acted as though she had the heaves. I gave her some heave remedy, but it did no good. She coughs only when she stands in the barn and for a short time after going out, or when she becomes excited. She is very nervous. Please let me know what I can do for her.—W. S., Vina, Cal.

Answer—In all probability your mare has the heaves, and a permanent cure is impossible. Moisten hay with salt water before feeding, shaking well to remove dust, and give two table-spoons of "Fowler's Solution" in grain night and morning. Avoid stuffing with coarse, fibrous, indigestible foods.

The Live Stock and Dairy Journal—I have a mare weighing about 1550 pounds which I bought about nine months ago and did not notice that she had a fault in her hind legs. She lifts them high from the ground as though she expects to step over something high. This is more noticeable when first taking her out of the barn than after she works an hour or so.

She is also apparently getting worse than when I first got her. She is about 9 or 10 years old and in good shape otherwise. I shall be very grateful to you for an answer which will lead to her recovery.—P. T., Washougal, Wash.

Your mare has stringhalt. It will not interfere with her work materially. It is incurable in about 75 per cent of cases, and is cured only by operation by a skilled veterinarian.

The Live Stock and Dairy Journal—I have a small Jersey-Holstein that was fresh with second calf about May 10th. Seemed to give fairly rich milk when I first bought her, but later seemed to decrease in cream. Had several boils on the udder; amount of cream seems to vary; sometimes 6 per cent rises, sometimes 3 or 4; tested 3.6. I feed alfalfa and stock hay; for mash, bran middlings, alfalfa meal, about a gallon, dry measure, then wet it, putting in a handful of cocoanut cake and some salt. She gave a little better than four gallons at first milking, and gives about three gallons at present. Was bred a few days ago. Do you think she will be any good when fresh the third time? It seems there should be more cream rise.—A. T. S., Oakland, Cal.

Answer—Your cow undoubtedly has some constitutional disturbance, in all probability tuberculosis, and if such is the case she will gradually decline and the milk will decrease in richness and quantity.

The Live Stock and Dairy Journal—My pigs are afflicted with a mouth disease. When they are about two weeks old, and sometimes before, small ulcers appear in their mouths, they appear unable to suckle, and waste away and die. Is the disease contagious, and what can I do to cure or prevent it?

I also have a fine stallion who knocked the skin off a spot on one of his hind legs. The sore would heal, but the flies keep the stallion constantly stamping and irritated. I wash the sore daily with a sheep dip solution. Can you suggest anything to use to keep the flies away.—Subscriber, Yolo Co., Cal.

1—Your pigs are suffering from thrush, which is due in a great many instances to bacterial invasion, oftentimes to irritations existing on premises, such as dirt, filth, etc. Death is generally due to starvation, due to the inability to get proper nourishment because of pain evinced. The condition is contagious in some instances (bactena), and this must be taken into consideration in treatment. The treatment should consist of thorough disinfection of premises, and white-washing and local treatment of mouth. Peroxide of hydrogen and water, equal parts, applied to mouth twice daily, followed by a 1/4 (one-four) solution of any of the cheaper imitations of Thymoline, such as Boral, Borothymol, Thymalka, etc.

2—It is possible the sore mentioned may be a summer sore. If so you will find it very obstinate, especially during the summer months. At this time I feel that the following may be of some value in treatment, but if it should fail, kindly let us hear from you again:
Sulphate of zinc.....1½ ozs.
Acetate of lead.....1½ ozs.
Water to make one pint.
Shake well and apply three times daily.

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POULTRY DEPARTMENT

TIMELY POULTRY POINTERS.

Have incubators in order for fall hatching.

Supply molting hens green stuff and good feed.

Bring along growing stock by the same process.

See that clean water is supplied each day to all stock.

Clean out the summer's nests, and do not allow the mites to rule.

Patch up all leaks in the roof of the hen houses for winter.

If disease comes, medicate at once, and disinfect and separate.

The surest sign for disease is running nostrils or dirty ones. A healthy chicken always has clean nostrils.

Some novices recommend the ax, but medicine will often cure.

Nature will not be fooled. You can not get something out of nothing, which means you must feed plenty of good feed and regularly.

First comes supplying for loss in vitality, flesh and muscle. Then comes the supplying of material for eggs, all in order named.

POULTRY SHOWS.

The utility man in poultry sometimes imagines poultry shows do not help him, as he has no birds worth taking there and his interest in the matter is at low ebb, but just consider what the poultry shows have done and are doing for the ordinary utility man, the rancher, the farmer, the man or woman who has a few dozen chickens or a thousand laying hens.

First, the shows have been the cause of getting a regular standard set for all breeds of poultry, which states exactly what constitutes a standard-bred fowl. The shows have been the direct cause of enhancing the prices of good chickens and other poultry, of making it possible for the breeder to obtain the value of his product whether for show purposes or for fine laying stock. They have been the means of inculcating into the minds of people that good standard-bred stock is the best, and is the only kind they should cater to, consequently the breeds have increased in type and real value. They have been actual disseminators of the best knowledge pertaining to poultry, of poultry appliances, feeds and everything concerning the requisites of the poultry yard, whether for the fancier or utility man or woman. They have created a stimulus which is real and lasting for the best in poultrydom, and they have been the means of giving many a man and woman actual cash values in premiums, advertising and later sales which they could not possibly have obtained any other way.

Many of you have chickens or other poultry that would obtain a blue ribbon if you would take a little care of them and get up courage to push them forth to the show. If beaten by the other fellow, take it philosophically. Be game and try again. It is the duty of every man and woman who keeps chickens or other poultry to attend the poultry shows to see what the other men and women are doing in that line; to see what constitutes fine birds; to get points, to find what is new in feeding, appliances, helps, medication and not least, to help the good cause along.

CAUSES OF SOFT-SHELLED EGGS

You may have noticed that soft-shelled, thin-shelled, cracked and broken eggs are more in evidence during the summer and early fall than any other time, for which there are causes which may be remedied to some extent, or at least relieved.

At this time of the year the layers are molting or finishing it, and their vitality is at a low ebb at such a time; or, in other words, they are half sick, to say the least, so that their power of assimilation of food is not good. In fact, you may notice how they pick here and nibble there, picking up a morsel of the mash, turning it over, then taking about half of it—so different from the same hens in April or March, when you could hardly supply them sufficient feed.

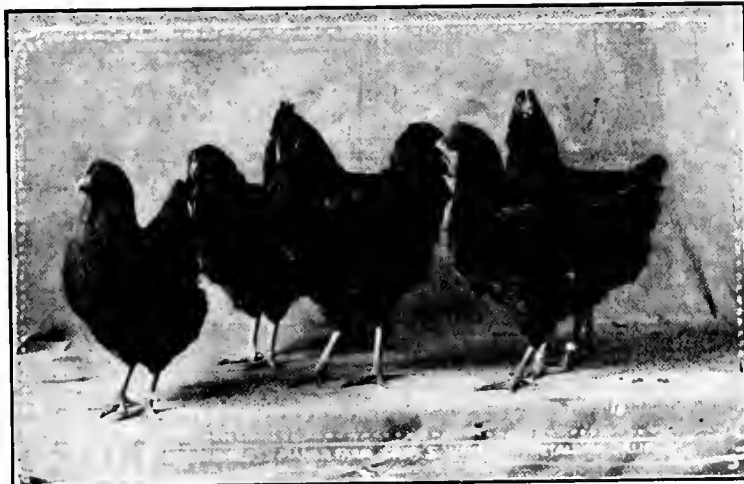
What is the result of their daintiness in eating and lack of robust

There is no doubt that in some cases such a lack of hardness is caused by the carelessness of the caretaker in not supplying broken shell or lime, for the layers must have some where they may get what they require each day.

Soft-shells are, in a few instances, caused by over-stimulation of the egg organs by supplying too much stimulating feed, and once in a while by inflammation of the egg passage.

The deductions are these: If the hens are molting they require more care in getting good, nourishing feed. They should have a tonic, and oyster, clam or other shells should be supplied at all times. Instead of egg-producing feeds they should be given substantial feeds intended to build up the system. More green stuff should be supplied. Grit should be placed where they may take what they require. Once a week a small percent of fine, broken shell may be mixed in the mash.

If the cause is being too fat, all



Pen of Rhode Island Reds. Owned by Manor Farm, Petaluma, Cal. Pronounced by Experts to be One of the Finest Pens of R. I. Reds on the Coast.

health? Why, they do not get into their system enough of the necessities to produce the eggs of the same strength as in earlier months. Primarily in the production of good, hard shells they require lime in some form, so whether in oyster shells, which make the finest egg shells, or in slacked lime, in clam shell, limed water or broken stone containing lime, it is certain quite some lime is required when you reason that if a hen lays but three eggs weekly it is requisite she must get lime in her system sufficient to form those egg shells every second day or so.

Being in a low state of health she does not pick up the pieces of shell or lime as she should, and the warm days do not add to her strength or vitality, the result being the shells are weak, thin, cracked or without the requisite lime to give hardness to the exterior of the egg.

In some feeds she may pick up there may be a small percent of lime, though not enough to give continual egg production the hardness required, while the state of health in molting time prevents her from picking up as much of those materials in the way of feed as she would in perfect health, consequently there would be a shortage of lime in any case—that is, if not specially attended to by the caretaker.

corn and fat-producing feeds should be left out, and a heaping teaspoonful of sulphate of magnesia mixed in a pint of drinking water supplied them twice a week.

POULTRY SHOWS.

State Fair Poultry Show—Sacramento, Cal., September 14-21.

San Jose, Cal.—October 9-14, Charles R. Harker, Secretary.

Oakland, Cal.—November 25-December 1. C. G. Hinds, Secretary, 434 Forty-second Street, Oakland, Cal.

Petaluma, Cal.—December 5-8. H. R. Campbell, Secretary.

Fresno, Cal.—December 11-14. Russell Uhler, Secretary, Fresno, Cal.

Napa, Cal.—December 19-22, Wallace Rutherford, Secretary, Napa, Cal.

Stockton, Cal.—November 13-17. Earl Dennison, Secretary.

Riverside, Cal.—November 14-16. E. T. Hammond, Route 3, Secretary.

Monrovia, Cal.—December 3-7. A. H. Memmler, Secretary.

Watsonville, Cal.—December 18-21. Pajaro Valley Poultry Association.

Santa Barbara, Cal.—December 31-January 3. C. D. Waters, Secretary.

Pasadena, Cal.—December 11-14. J. M. Wright, Secretary.

Los Angeles, Cal.—January 8-14. J. E. Davis, Box 148, Route 11, Secretary.

STANDARD-BRED POULTRY ON THE RANCH

Some people think that any kind of a hen will do for laying, and that she will lay eggs at any old time if she is well fed, not taking into consideration the type, age, breed and individuality of that particular hen. But their hypothesis is all wrong, for they may as well say that any Tom, Dick or Jack picked up on the street is qualified for the presidency or to be a lawyer.

Standard-bred poultry are as much required for the farm and ranch as they are for shows and the fancier. Not only standard-bred, but the egg producers which show by style and general contour that they are producers.

You beemen know from experience that you have the queens, the workers and the drones, and you also know which kind make the honey and the consequent cash, yet some of you fail to see the same relations in nature in regard to hens or other poultry, and go on buying or raising any old kind and type of chickens.

You may say the parallel is not complete with bees and chickens, but see if it is, for we have the roosters, non-producing but necessary, so we have to keep a certain number, and incidentally they seem to be the lords of creation, but when it comes to keeping a lot of pullets or hens which are non-producers on account of type or old age or some idiosyncrasy the table is the finest place for that kind, as they will not pay their way in any chicken yard, for the eggs they lay will be few and far between for profit.

It is a fact well known to the experienced man or woman in poultry that the types of best layers come from the standard-bred lines, and they are the only kind that pay, whether in eggs, resultant chicks or for fine types and feathers, and the experts in government and private life assert the same facts, for years of experience have proved them.

The advice is to keep strictly to the standard-bred types and not try cross breeding, for you will get only mongrels unless you are an expert at the business, and if you have any that do not come up to the type of standard bred in the breed kept, do not breed from them.

You may say, How will I know they are regular egg producers? Why, it is easy. If you will make trap nests you will soon know which lay and which do not. If you will get Farmers Bulletin No. 114 on experimentation work from the United States Department of Agriculture at Washington D. C., you will see how to make a trap nest and the uses for it. Farmers Bulletin No. 51 will give you the standard varieties of chickens.

It is well known that all chickens raised from a standard-bred hen and rooster will not necessarily be good layers, so that is where the usefulness of the trap nest comes in. For the man or woman who has not time or inclination to make and use trap nests there are men who have made a business of picking out the types of laying pullets and hens with certainty.

Whether on the ranch, the farm or in a small chicken yard, the standard bred chickens pay the best.

Questions and Answers

BY THE POULTRY SPECIALIST.

A valuable and instructive feature of our Poultry Department is "Questions and Answers." Any of our subscribers desiring advice or information upon any matter pertaining to poultry raising will please address Poultry Editor, The Live Stock and Dairy Journal, Sacramento, Cal., and answers will be printed in this department.

Poultry Editor The Live Stock and Dairy Journal—I would like a little information regarding my baby chicks. They act as though they had fits. I am feeding them hard boiled eggs and bran.—W. S., Elko, Nev.

Nature is rebelling against the way I feed them, for hard boiled eggs not provided to poultry in nature, seeds and grit and green stuff. If the baby chicks do not get those, their gizzards get somewhat atrophied account of lack of work in grinding food, then indigestion sets up and derangements quickly follow. In your particular case, they are on a very rich feed in addition to it being soft and requiring no grinding, what is the result? Their livers get out of order with too rich feeding, and they are similar to humans in that respect. They get dizzy, fall over and will die from acute indigestion. The remedy is to change the way of feeding at once by giving small chick feed in fine litter where they will work over every grain and seed. Supply grit and charcoal as a grinder and correct respectively, and do not get plenty of very short green stuff, no mashes or boiled eggs till ten weeks or 3 months, then but a small quantity.

Poultry Editor The Live Stock and Dairy Journal—I have some chickens afflicted with stick-tight fleas. Can you tell me the cause and remedy. I have some with scaly legs.—E. K., Pendle, Ariz.

Stick-tight fleas are generally found on sandy soils, and they bore in the skin of the head and combs of the chickens. To cure, swab the heads of the affected ones with a solution of equal parts of sweet oil and kerosene, in which has been mixed a few drops of carbolic acid. To cure scaly legs give two application two days apart of the following: Equal parts of coal oil and sweet oil in which has been mixed a small lot of sulphur.

Poultry Editor The Live Stock and Dairy Journal—How soon may I use eggs from a pullet for hatching, she being now 7 months old. A reply in your paper will be appreciated by yours truly, M. V., Petaluma, Cal.

It is not advisable for good results to use the eggs for hatching from a chicken till it is 10 to 14 months old. In some chickens it would be better to wait till it was 15 to 18 months, depending on the growth and readiness.

Poultry Editor The Live Stock and Dairy Journal—How can I prevent toe picking in my young chicks? Truly yours, L. C., Junction City, Ore.

By keeping them busy in picking up seeds and fine grains in plenty of litter, mixing a small per cent of blood meal in dry bran in a hopper, and also using in it about 2 per cent of charcoal. In addition to these give some heads of lettuce to pick at.

Poultry Editor The Live Stock and Dairy Journal—My hens are laying very small eggs, and have done so all through the warm months, though in

spring they produce fine, big ones. What is the cause and remedy? Oblige, E. H., Corning, Cal.

It being molting time, or very near to it, depending on the age of the layers, they require more nutrition and richer feed to care for the new feathers, and lack of red corpuscles in the blood. So if they do not get a certain amount of beef scraps, blood meal or similar material in the mashes, with lots of green stuff, the supply of eggs will diminish in quantity and size, for nature's demands will come first to fill the lack of feathering and bodily requirements, and the rich feeding must be given once daily.

Poultry Editor The Live Stock and Dairy Journal—Is it requisite or a good thing to have roosters with the hens during molting time? A reply in your paper will greatly oblige. Yours truly, A. B., Hanford, Cal.

Roosters should be separated from the layers when molting commences, or before, and kept away till the hens have fully recovered and are in good laying order.

Poultry Editor The Live Stock and Dairy Journal—Will you please tell me what breed of ducks is best for table purposes, and how many hens of White Minorcas should be given to a rooster? Thanking you in advance, yours, W. H., Oakland, Cal.

The finest table ducks are the White Pekin, and about fifteen hens of White Minorca breed may be given safely to a rooster.

CARE OF POULTRY IN SUMMER

It does not require much hard work to keep a flock in good condition in the summer, but absolute neglect will often completely destroy the winter egg-producing qualities of not only the old hens, but the pullets as well. If you have not removed every window in the chicken house and substituted wire netting in order to provide perfect ventilation, do so at once. Better that the chicks roost in the trees than that they be confined in a vermin ridden building. Body lice will worry a flock to death, or so nearly so as to destroy its usefulness. These can be killed, but not easily.

Good insect powder will do the business. It should be applied with a powder spray by one person, while another holds the fowls by the legs so that the powder may reach every part of the skin through the disturbed feathers.

Birds are so constituted by nature that they require an abundance of fresh air for health and vigor. They never do well with a limited supply of air. For this reason all coops and boxes in which poultry of any kind is kept in the summer should be as open as possible.

Let the roof be tight to protect from rain, but let at least one side be open for the admission of fresh air at all times. The open side may be protected by wire cloth or other material that will let in the air, but keep out rodents.

White Wyandottes

If you want the best in California, in Stock and Eggs, ultimately you will have to come to me.

Cockerels	\$5.00 to \$25.00
Hens	3.50 to 5.00
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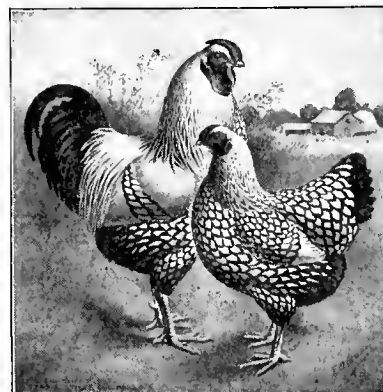
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I guarantee a good hatch or replace the setting.

Poultry Breeders' Directory

Under this heading, for a nominal charge, payable in advance, we will insert names and addresses of breeders of various varieties of poultry. This is done for the convenience of owners of flocks who wish to keep their names before the public the year round. Display advertising is undoubtedly the big business getter of today, but no doubt there are many breeders who are not justified in carrying a display ad during the entire year. To such breeders the economy and convenience of this column is readily apparent.

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ANIMAL FOOD FOR REARING CHICKS.

That fowls are great meat eaters must be apparent to the most casual observer. They are constantly on the alert, to appropriate to their own consumption most forms of insect life within their reach. A hen with a brood of chicks is especially active in this direction, finding (if allowed to range) enough insects and earth worms to supply her brood with a good proportion of animal food. Chicks reared in brooders may need as much animal food as the hen-reared chicks, but they are not able to procure it by their own effort. That animal food or some sort should be supplied to artificially reared chicks is conceded by most poultrymen; but the kind of animal food to be given and the proportion of this material to total food is an open question.

The most common sources of supply meat scraps, eggs, skimmed milk and granulated milk. A third-grade powdered milk has been fed in connection with a ration containing beef scrap, and with good success. Unfortunately this product is not now on the market.

Meat scrap is one of the most useful and convenient of the animal foods used for chicks, but must be absolutely without taint or mustiness if it is to be used for this purpose. It is rich in protein and (if it contains a good proportion of bone) in mineral matter, which are necessary for the building up of the muscles, bones and feathers of the chicks.

Rhode Island Bulletin No. 145 says that in experiments at that station high-grade beef scraps proved to be one of the best protein concentrates, and was superior to animal meat in rations containing the same amount of animal food for chick feeding are of protein. Beef scrap varies much in condition and composition, and only the best should be used for the young chicks. Sifted beef scrap usually has a smaller percentage of ash, but the addition to the ration of some material rich in the minerals needed will remedy this defect.

Bone meat or cracked bone are largely used to correct the deficiency in available mineral matter which exists in most chick rations, even those containing a good per cent of beef scrap. Rhode Island Bulletin No. 126 states that it has been demonstrated at that station that phosphorus and lime are necessary as protein for chick rearing. New York (Geneva) Bulletin No. 242 advises the use of bones for supplying these materials, rather than bone ash or Florida rock.

Eggs are well liked, and are extensively used in "starting" the chicks, or during the first week or ten days after hatching. They are usually boiled hard and mixed (shells and all) with bread crumbs or rolled oats. Eggs are, however, expensive food unless the infertiles from incubation are used.

Skimmed milk is one of the best and cheapest of the animal foods, and seems to induce a more rapid growth on the part of the chicks than would be expected from the amount of food materials it contains. It is claimed that in chick feeding the acid of the sour milk has a medicinal effect. It was shown by experiment at the Indiana Experiment Station that the addition of skim milk to the ration of growing chicks increased the efficiency of the other foods consumed, and that the period of greatest growth of the chicks was also the period of greatest milk consumption. (Indiana Bulletins Nos. 71 and 76.)

New York (Geneva) Bulletin No. 39 says that skimmed milk can be as

profitably fed to chickens as to swine.

Sour milk curd, or "cottage cheese," is valuable, but should be carefully fed so that the chicks do not get too much of it at any one time.

Granulated milk or milk albumen has given good results in chick rearing, especially when fed in connection with a ration containing beef scrap; but does not seem to be quite equal for this purpose to the sour skimmed milk.

Bulletin No. 126 of the Rhode Island Experiment Station states that although by the addition of ground bone, milk albumen may be made as efficient for chick feeding as animal meal, it may not be possible to induce the chicks to eat enough of the milk albumen ration to produce as rapid growth as on the animal meal ration.

How far milk and its products may be substituted for meat food has not been proved by experiment. It has been shown, however, that a ration containing meat food may be improved in efficiency by the addition of sour skimmed milk. In an experiment conducted at the Cornell Station a ration consisting of cracked grain, ground grain and beef scrap, with plenty of green food, was fed to a flock of 100 chicks just from the incubators. An exactly similar ration to which sour skimmed milk had been supplied in connection with a well-balanced ration, was from 13 to 16 per cent for the first two weeks, decreasing as the chicks grew older. No ill feeding beef scrap was seen at any time.

Experiments at the Rhode Island Experiment Station also support the practice of hopper feeding beef scrap to young chicks, especially in connection with a highly carbonaceous ration. (R. I. Bulletin 145.) Just the limit in meat food consumption has not been shown, but in the case of the experiment at the Cornell Station it was evidently well under 30 per cent of the total food. One flock, given an unsatisfactory ration, with hopper-fed beef scrap, ate over 30 per cent of total food in meat, and eighty died before seven weeks old. Whether this was entirely due to the proportion of beef scrap or whether part of the trouble was caused by the lack of some necessary element in the food was not proved.

In the chick feeding experiment above mentioned the chicks which for the first few weeks were given a limited amount of beef scrap in their food, weighed 63.9 pounds per 100 chicks at eight weeks old, while those which from the beginning were given all the meat scrap they wished, weighed 70.5 pounds per 100 chicks at the same age; 10.9 per cent additional gain, for the greater proportion of meat.

Whether the more rapid early growth is a distinct advantage, where the chicks are to be kept for layers, remains to be proved.—Clara Nixon in Cornell Countryman.

If farmers would use the same judgment in feeding their poultry that they use in feeding their dairy cows they would soon find the results quite satisfactory.

As much poultry feed as possible should be grown on the farm, but additional feeds may be bought as necessary, such as bran middlings, gluten meal or beef scraps.

Women as a rule are more progressive and quicker to seize a new idea and put it into practice in the poultry yard than the sterner sex.

Three-fourths of the diseases could be traced to impure air, dampness, improper food, close breeding and ill-chosen conditions.

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What kind are you going to buy? That's the question. Whether you will take the advice of thousands of successful users and buy

COULSON'S EGG FOOD

or whether you will not take advice and buy some other Egg Food which is said to be "just as good." The curse of substitution has cost many a poultryman his success. Will you let it cost you yours? **COULSON'S EGG FOOD** is the result of years of careful study and analysis. We have considered properties in eggs and have put those properties into our Egg Food.

We publish a booklet, "Poultry Feeding for Profit," which should be in every home. It is interesting, instructive and profitable. We will mail you a copy FREE if you sent your name and address.

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S. C. White Leghorns

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CHARLES V. PARKER,

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PRACTICAL POULTRY KEEPING—R. B. Sando. Comprehensive manual of instruction for raising poultry on large or small scale. Has chapters on housing and yarding, fixtures and equipment, choosing and buying stock, foods and feeding, hatching and raising chicks, inbreeding, caponizing, etc.

PROFITABLE BREEDS OF POULTRY—A. S. Wheeler. Discusses such breeds as Rhode Island Reds, Plymouth Rocks, Wyandottes, Mediterraneans, Orpingtons describing the peculiarities and possibilities of each. Also has a chapter on the market side of poultry raising.

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Sacramento, Cal.

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I. C. PUREBRED REGISTERED HOGS—Young stock, both sexes. Write for prices. Pedigrees guaranteed. Best foundation stock in State. J. W. Benoit, R. 2, Modesto, Cal.

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have a few purebred Holstein bull calves out of my best registered cows for sale. These young males are choice-bred. Have many registered cows coming in this fall. Write now and engage their offspring. For prices and pedigrees write B. F. Anderson, Modesto, Cal.

What Have You to Sell or Exchange?

No matter where you live in California, Arizona, New Mexico, Utah, Nevada, Idaho or Oregon, the Classified Advertisements in the JOURNAL are read by your neighbors. Perhaps some one within ten miles of your home wants to buy just what you want to sell, and would buy from you if he knew what you have. Tell him what you have through this classified page.

O. I. C. HOGS—I breed purebreds only. All registered, and papers go with all sales. Sire, Creamery Sport, whose sire is Martin Sport; dam, Pansy Blossom. Have six 1-year-old sows for sale. Also young stock coming along. Write me to reserve your orders for young stock of both sexes. M. A. McLean, Route 5, Modesto, Cal.

NEVADA BRED BERKSHIRES—Bred to breed and to win. Masterpiece and Master Lee, sires. Rugged, pasture-fed pigs. Come and see them, or write. L. B. Patrick, Box 287, Reno, Nev.

PUREBRED DUROC-JERSEY BOAR for sale—Fifteen months old. Bargain. Inquire Pagehurst Stock Farm, Orland, Cal.

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Seventy acres choicest Mokelumne River Bottom Land; will produce five crops alfalfa without irrigation; improvements, two large stock barns, skimming station, house, sheds, Bartlett pear orchard. Gaited saddle, driving and business horses. A licensed imported German coach stallion. N. H. Locke Co., Lockeford, Cal.

FOUR PUREBRED HOLSTEIN BULLS FOR SALE—All registered and papers go with sale. These fine individuals were raised by the well known breeder, C. T. Brown of Porterville. Pedigrees and ages follow: Capitain Zampa Ormsby (92136), 16 months, sire Silentshade Cantate (57775), dam Lady May Ormsby (147168). I have also a 2-year-old, Hartog Ormsby, sire Sir Skylark Ormsby Hengerveld (39138), dam Leda Hartog De Kol (135401), and two 16-month-old fine young sires by Silentshade Cantate. For quick sale, \$100 to \$150, according to age and pedigree. Write or call on J. A. Pollard, Modesto, Cal. Ranch one mile from town.

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HOLSTEIN BULLS FOR SALE—Purebred, registered, fine young fellows. For years and years I have given attention to building up a herd of Holsteins. It has been my life work. Have a son of Princess Ziska, also a son of Lady Bountiful Faskie, sired by Modesto Boy. Also yearling by Constance Sir De Kol. M. A. McLean, Route 5, Modesto, Cal.

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FARM LANDS.

VALUABLE INFORMATION contained in our monthly Farm List. Gives reliable data on California agricultural industries, with large list of farms for sale adapted to the various branches of agriculture. Send in your name and address and a copy will be mailed to you postpaid. California Colonization Company, 1114 Tenth Street, Sacramento, Cal.

LARGE AND SMALL FARMS, grain and dairy ranches for sale in Modesto and Turlock irrigation districts. Terms and prices on application. Stanislaus Real Estate Company, Modesto, Cal.

BEAUTIFUL ORCHARD HOME—10 acres orchard in Orangevale, Sacramento County, California, planted to 900 almond trees (paper and softshell), 2500 grape vines (Emperors, Bl. Moroccos, Tokays, Missions), all in full bearing; also figs, prunes, apples, pears, oranges, persimmons, Chinese dates, etc., etc. A 1½ story, 5 room house, bath and pantry; hard finished inside, large basement; windmill and tank; water piped through house and for irrigation; stables, packing sheds, chicken houses, sulphur house, 2 fine horses, wagons, implements, tools; complete in all details. This place has to be investigated to appreciate what a bargain it is; annual income over 25 per cent on investment. New electric R. R. station ¼ mile. Price only \$5250.

Address: Owner, Box 1, care The Live Stock and Dairy Journal, Sacramento, California.

BUSINESS CHANCES.

LIVERY STABLE FOR SALE—On account of my health I will sell my Palace Livery Stable at Napa, Cal., containing fifteen horses, two hacks, bus, excursion wagon, ten buggies, rubber-tired runabouts, harness for all horses, whips, robes, etc. Equipment for a first-class stable. Eight boarders, good business contracts. A great bargain for a liveryman or any young man desiring to go into business. Seven year lease at extremely cheap rent. Business clears between \$300 and \$400 per month. Investigation invited. Apply Geo. W. Berry, Napa, Cal.

FOR SALE OR EXCHANGE.

FOR SALE OR WILL EXCHANGE for dairy or farm land anywhere in the Northwest, one lot 150x103, with modern six-room cottage, shade and fruit trees, currant and gooseberry bushes, lawn, barn, chicken house, chicken wire corral. Room for two or three cows and horses. Good water right and garden. Good sale for milk, garden and chicken products. Good schools and churches. This good home is located in Gardnerville, Carson Valley, Nevada. For further particulars address: Owner, Box 5, care The Live Stock and Dairy Journal, Sacramento, Cal.

INVESTMENTS.

I wish to communicate with a few men or women willing to join a land company by investing in sums of \$100 up. The company now owns a 750-acre tract of fine sandy loam soil, especially adapted to raising fruit. Idea is to use proceeds from the sale of stock to plant land to orchard and then sell in subdivisions. This will bring original investors in our company a handsome profit. All money invested in our company is secured by actual land now being farmed. It is our intention to fatten hogs on crops raised between the rows of trees until such time as the orchard is ready for sale, and if this plan is carried out, stock in the company should pay dividends at the end of the first year. For full details address owner: Wm. Brown, 109 New Montgomery Street, San Francisco.

Clinton J. Brown, the well-known Porterville dairyman, recently sold his female Holsteins, eighty head in all, to the Carnation Stock Farm of Seattle, Wash., at \$150 per head. Mr. Brown had been a breeder for fifty years, and had one of the finest dairy herds in California. He writes us that the registered stock business has been found very satisfactory, and that he retires only on account of age and a desire to take a rest.

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PLATFORMS OF THE POLITICAL PARTIES.

The Live Stock and Dairy Journal—This association had committees at the conventions of the political parties for the purpose of looking after the interests of the live stock industry, so far as they relate to the tariff on live stock and meat food products, and we are pleased to report that our efforts to secure a just recognition of the rights of the farmer and stockman were successful. None of the platforms of the three important political parties declares for free raw material for free trade in the products of the farm or ranch.

In the platform of the Republican party, adopted at Chicago, June 23, 1912, appears the following:

"We reaffirm our belief in a protective tariff. The Republican tariff policy has been of the greatest benefit to the country, developing our resources, diversifying our industries and protecting our workmen against competition with cheaper labor abroad, thus establishing for our wage earners the American standard of living.

"The protective tariff is so woven into the fabrics of our industrial and agricultural life that to substitute for it a tariff for revenue only would destroy many industries and throw millions of people out of employment. The products of the farm and the mines should receive the same measure of protection as other products of American labor."

The Democratic platform, adopted at Baltimore, July 2, 1912, while declaring for a tariff for revenue and favoring "the immediate downward revision of the existing high, and in many cases prohibitive, tariff duties," and "insisting that material reduction be speedily made upon the necessities of life," does not demand that farm products or live stock be placed on the free list, but favors "the ultimate attainment of the principles we advocate by legislation that will not injure or destroy legitimate industry."

The following is an extract from the Democratic platform:

"We declare it to be a fundamental principle of the Democratic party that the Federal Government, under the Constitution, has no right or power to impose or collect tariff duties, except for the purpose of revenue, and we demand that the collection of such taxes shall be limited to the necessities of the Government honestly and economically administered.

"The high Republican tariff is the principal cause of the unequal distribution of wealth; it is a system of taxation which makes the rich richer and the poor poorer; under its operations the American farmer and laboring man are the chief sufferers; it raises the cost of the necessities of life to them, but does not protect their product or wage. The farmer sells largely in free markets and buys almost entirely in the protected markets.

"We favor the immediate downward revision of the existing high, and in many cases prohibitive, tariff dues, insisting that material reductions be speedily made upon the necessities of life. Articles entering into competition with the trust-controlled products, and articles of American manufacture which are sold abroad more cheaply than at home, should be put upon the free list.

"We recognize that our system of tariff taxation is intimately connected with the business of the

country, and we favor the ultimate attainment of the principles we advocate by legislation that will not injure or destroy legitimate industry."

The platform of the Progressive party, adopted at Chicago, August 7, 1912, states:

"We believe in a protective tariff which shall equalize conditions of competition between the United States and foreign countries, both for the farmer and the manufacturer, and which shall maintain for labor an adequate standard of living. . . . We demand the immediate repeal of the Canadian reciprocity act."

The nominees in their speeches of acceptance all dwelt at some length on the tariff and referred to the importance of its careful revision, either through the medium of a Tariff Commission reporting to the President and Congress, or by Congress direct, so as not to interfere with the healthful course of business.

No matter which party is successful this fall, Congress will undoubtedly, at its next session, enter into another consideration of many tariff schedules, possibly those covering the products of the farm and ranch. It is, therefore, vitally important that those interested in the live stock industry should make it their personal business to see that all candidates for the House of Representatives and the Senate are pledged to a fair and equitable treatment of our industry in the tariff. The labor on the farm and ranch should be accorded its just share of whatever benefits may flow from the present system of raising revenue by means of tariff duties.

In March of this year this association published a pamphlet entitled "A Plain Statement of Facts Regarding the Interest of the Farmer and Stockman in the Tariff," and distributed over one hundred thousand copies. We believe that the campaign of education by this association on this question aided very materially in securing a proper recognition of our rights in the platforms of the three political parties. Now is the time to secure the support of candidates for Congress. With their support pledged in advance, we can successfully protect our rights in the next Congress. Our members are urgently requested to take this matter up with the candidates of their respective states.

H. A. JASTRO,
President.

T. W. TOMLINSON,
Secretary.

Denver, Col., August 17, 1912.

RECOGNIZE VALUE OF PUREBRED STOCK

Miller & Lux, the greatest stock raising company in the West, have purchased within the past month 88 head of registered purebred Poland China swine and seven registered purebred Holstein-Friesian bulls. This is not by any means the first lot of purebred sires which Miller & Lux have used on their herds, but it seems to be an indication that they will in future use a better class of purebred sires than ever before. Their example is one worth the thought of the owner of a small herd. They know that through the use of purebred sires in their beef cattle, dairy cattle and swine herds they can breed stock which will produce beef, pork, milk and butter in greater quantity at little, if any, additional expense. What is good for the big herds of Miller & Lux applies equally well to the small herd, and the owner who does not investigate the economic principle involved in the use of the purebred sire is suffering an unnecessary waste of his time, his feed and his money.

Market Review and Forecast

SAN FRANCISCO DAIRY PRODUCE MARKET.

OFFICIAL FIGURES OF SAN FRANCISCO WHOLESALE DAIRY PRODUCE EXCHANGE.

Note—The butter quotations below are on California Extras, upon which butter-fat prices are based.

	BUTTER.	EGGS.				CHEESE.			
		Cal. Extras.	Firsts.	Seconds.	Selected Pullets.	Cal. Flats. Fancy.	Cal. Flats. Firsts.	Cal. Y. A. Fancy.	Cal. Y. A. Firsts.
July 26..	28½	24	23	21	20½	14	13½	16½	15
July 27..	29	24½	23	21	21	14	13½	16½	15
July 29..	29	24½	23	21	21	14	13½	16½	15
July 30..	29	25	23	21	21½	14	13½	16½	15
July 31..	29	25½	23	21	21½	14	13½	16	15
Aug. 1..	29	25½	23	21	21½	14	13½	15½	15
Aug. 2..	29	25½	23	21	21½	14	13½	15½	15
Aug. 3..	29	25	23	21	21½	14	13½	15½	15
Aug. 5..	30½	25½	23	21	22½	14	13½	16	15½
Aug. 6..	31½	26½	23	21	23	14	13½	16	15½
Aug. 7..	31½	27	23	21	23	14½	13½	16	15½
Aug. 8..	31½	27	23	21	23	14½	13½	16	15½
Aug. 9..	32	27½	23	21	23	14	13½	16	15½
Aug. 10..	32½	28	23	21	23½	14	13½	16	15½
Aug. 12..	32½	28½	24	21	23½	14	13½	16	15½
Aug. 13..	33	29	24	21	24	14	13½	16	15½
Aug. 14..	33	30	24	21	24½	14	13	16	15½
Aug. 15..	32	30	24	21	24	14	13	14½	15
Aug. 16..	32½	29	24	21	23	14	12½	15½	15
Aug. 17..	32	29	25½	21	23	14	12½	15½	15
Aug. 19..	32	29½	25½	21	23	14	12½	15½	15
Aug. 20..	33½	30	25½	21	24	14	12½	15½	15
Aug. 21..	32½	30	25½	21	24	14	12½	15½	15
Aug. 22..	33½	29½	26	21	24½	14	12½	16	15
Aug. 23..	33½	30	26	21	24	14	12½	16	15

TOTAL RECEIPTS AT SAN FRANCISCO WHOLESALE DAIRY PRODUCE EXCHANGE.

Week Ending—	Butter. Lbs.	Eggs. Doz.	Cheese. Lbs.
August 1.....	579,100	348,840	192,000
August 8.....	492,100	325,620	475,100
August 15.....	519,700	341,010	297,400
August 22.....	442,000	352,300

Somers & Co., San Francisco, say: Receipts of hay for the week amounted to 4962 tons, in comparison with 5070 for the week preceding. Nothing of special moment has happened during the week. Trade continues dull, and the heavy arrivals being disposed of only with difficulty and at prices which are lower than are being asked by holders of hay in the country. Stained and damaged hay is causing a great deal of confusion and dissatisfaction locally on account of the fact that generally hay is found to be much more damaged than the outside of the bales appear.

The fields in some of the hay districts are beginning to be quite well cleaned up, the hay either having been shipped or stored. It is the opinion of some that shipments to market will suddenly stop on account of the hay being all shipped from the fields, and that we will then see a much higher market here. Of course, it cannot be determined now whether this will be the case or not. Prices are high now, and it seems to be the opinion of the majority of those in touch with the situation that consumers will buy very sparingly at any higher prices than exist at the present time. We believe that the ultimate market for hay will be determined by the weather conditions of next winter and the amount of green feed which will be available at that time.

We quote present prices as follows: Fancy wheat hay, light bales.... \$21.50 No. 1 wheat or wheat and oat\$19.00 to 20.00 Good grade same..... 16.50 to 18.00

Other grades 12.00 to 16.00 Fancy tame oat hay..... 18.50 to 19.50 Good grade same..... 15.00 to 17.50 Wild oat hay..... 12.00 to 15.50 Stock hay..... 9.00 to 11.00 Alfalfa 11.50 to 13.50 Straw, per bale..... .35 to .65

FINE SHROPSHIRE.

The Live Stock and Dairy Journal—We are leaving in a few days for Oregon State Fair, and we think we are taking with us the finest show flock even seen on the Pacific Coast. We are proud of them, and proud of the work of Shepherd Ted Ballard.

We have a home bred yearling ewe in the lot which Ted thinks the best American bred ewe he ever saw. She certainly is a beautiful little sheep.

We sold a ram to Golden Gate Park the other day, a fine, typey fellow, and we are sure that Mr. McLaren will be pleased with him.

BISHOP BROTHERS.
San Ramon, Cal.

H. V. Traynham of Colusa County reports the sale of the Hampshire Down and Shropshire bucks that he was advertising in the *Journal* to Spencer & Baibly.

The latest fashion in draft horses demands quality, finish, style, spirit and action to an unprecedented degree.

**A
Beautiful
Orchard Home
In
Yolo County
California**



**Forty
Acres of
Sandy Loam
28 Feet
Deep**

Square plot, bounded on south and west by county road. This land is level and all fully improved. The orchard comprises 14 acres Anir peaches, 5 acres Foster peaches, 5 acres Mary's Choice peaches, 5 acres Susquehanna peaches, 5 acres Royal apricots, 5 acres Bleinheim apricots. Orchard is 16 years old, in good bearing. About one acre is under house gardens, barn, corral, etc.

The cottage of 7 rooms has concrete cellar, 4 sleeping rooms, large dining room, kitchen and summer kitchen. Running water and hot water.

EQUIPMENT—Engine for pumping water for house and garden. House garden has oranges, lemons, grapes, apples, pampas, plums, cherries, pears, flowers and vines; also good vegetable garden; blacksmith shop and tools. Orchard pumping plant equipped with 18-horsepower gasoline engine and No. 5 pump, throwing 480,000 gallons of water every ten working hours. Plenty of water and oil tanks; 2 packing sheds, 4 sulphur houses, steel tracks in shed to sulphur houses and drying yard; fruit room; pump and washing tank for trays and boxes; benches, ladders and buckets; tree props and about 4000 28x36 trays and 350 or more lug boxes.

Four fine American horses. One team weighs about 2800 pounds, the other about 2400; harness in sets; 2 wagon trucks; 2 buggies; 1 wagon with springs, 1 ditching machine; 1 three-section steel harrow; 1 three-furrow, 10-inch Deere steel gang plow; 2 single plows; 1 five-foot model F Deere disk; 1 single large wheel Deere disk and subsoiler; 1 spraying engine, tank and hose, pipe and nozzles; 1 dust sprayer and mixing tank; 1 Deere cultivator, brush rake and many other tools.

Taxes last year \$94.54. Absolutely clear title. Price of this property is \$25,000.00; \$10,000.00 cash and balance at terms to suit buyer, 6% net.

For further information and appointment to see property address:

OWNER, BOX 3, Care The Live Stock and Dairy Journal, SACRAMENTO, CALIFORNIA

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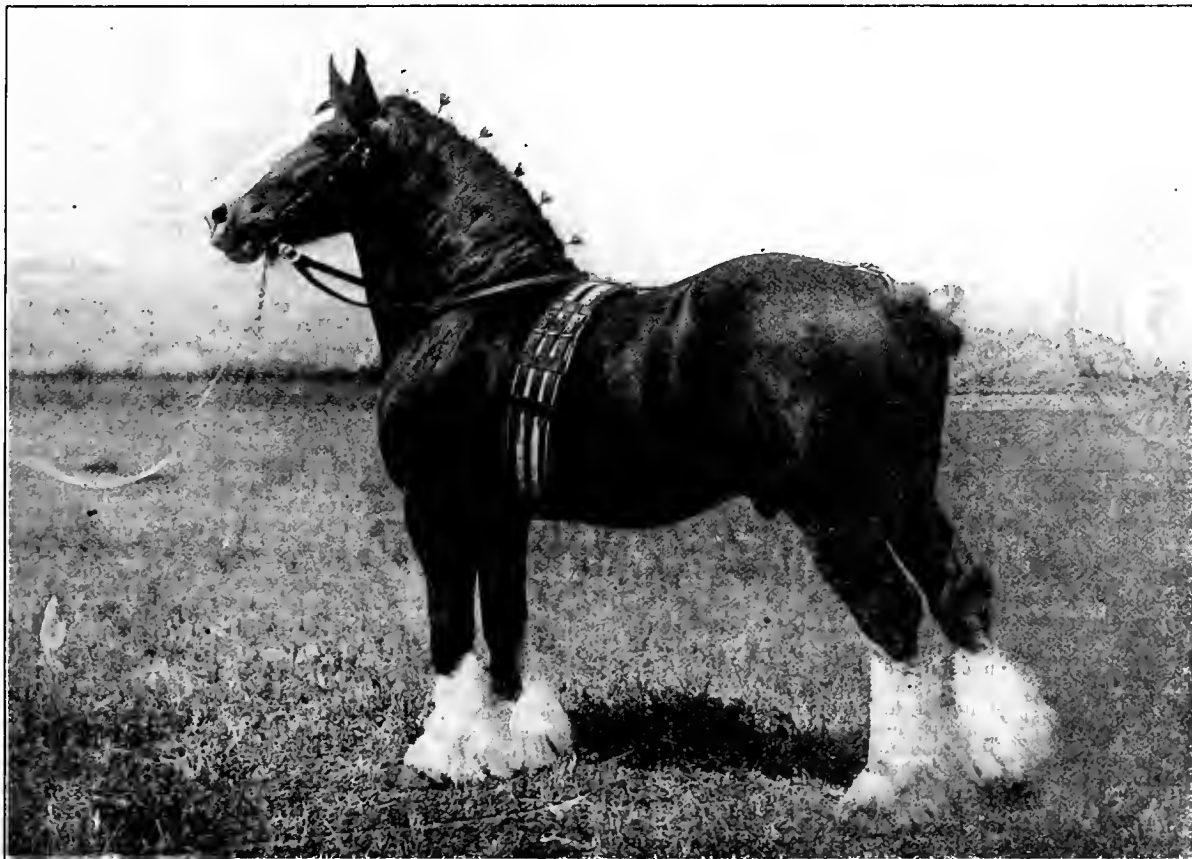
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THE LIVE STOCK and DAIRY JOURNAL

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

OCTOBER, 1912



Neuadd Hillside 28601. Grand Champion Shire Stallion California State Fair 1912

Owned and Exhibited by Henry Wheatley, Napa, California

AGRICULTURAL PUBLISHING COMPANY, SACRAMENTO, CAL.

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An Illustrated Monthly Publication for
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If you want to buy or sell any stock or merchandise in the great live stock, dairy and poultry centers of the Pacific Coast, get in touch with our advertising columns. We believe all advertising in this paper to be from persons or firms of the highest reliability. Every effort is made to protect our readers against misleading representation. We shall at all times appreciate evidence that advertisers have acted otherwise than in accordance with principles of strict business integrity.

The Journal is issued on or about the 5th of each month. Copy for all reading and advertising matter must be in our office not later than the 25th of month preceding date of issue.



THE STATE DAIRYMEN'S ASSOCIATION.

At the State Fair a movement was started for the formation of a State Dairymen's Association. Owing to the fact that the movement was almost entirely unadvertised in any of the publications having circulation among dairymen, very few of them knew anything about it, and the meeting was attended by less than twenty actual dairymen. Brief speeches were made by a number of those present, after Dr. Leroy Anderson had been chosen temporary chairman.

Warren B. Thurston, representing the Dairy Department of the Government, was for the immediate election of permanent officers. This was a good idea had proper preparation been made for the formation of the association, but as nothing had been done in the way of drafting a Constitution and By-Laws, it was first necessary to attend to that matter. As the time for action was so limited it was finally voted to elect temporary officers, who would appoint a Committee on Permanent Organization, and this committee having been appointed, was instructed to report to the Temporary Secretary, Dr. Leroy Anderson, at Turlock at the time of the Creamery Operators' meeting. A recess until that time was then declared.

Some consideration has been given in the past to the idea of letting dairymen become members of the Creamery Operators' Association, in fact, a number have already become members. It appears that the creamery men have

encouraged this idea to some extent, being willing to become a party to almost any arrangement whereby some good could be accomplished toward bringing the dairying business up to a higher standard, for a creamery can not make good products out of poor materials any more than any other manufacturing plant can.

While the interests of the creamery men and dairymen lie along very much the same lines, one supplementing the other, yet they are in reality two separate sets of business men, conflicting in some minor relations, and it is just those small points of difference which makes it appear absolutely impractical for both creamery men and dairymen to join in one big organization and get the best results for every one concerned.

The Creamery Operators have a good, live organization, and it is not fair to ask them to shoulder any of the responsibilities of the dairymen, although they have done it in the past to protect their own interests.

We suggest that enough representative dairymen make it a point to be present at Turlock and give the new California Dairymen's Association, or whatever name the organization may carry, a rousing, enthusiastic start.

Then, in order to provide for co-operative action between the two associations in such matters as affect their mutual interests, let a committee be formed composed of say four representatives of the dairymen and four representatives of the creamerymen, and a ninth man selected by the eight, and let this committee be the official representative of the two organizations in all matters upon which the two bodies desire action and united representation.

It seems to us that this plan would not interfere with the separate committees of each organization, and in situations which require concise, forcible presentation of facts, the single committee would be more efficient, and there would be less chance of confusion and misunderstanding than if two small committees were working.

DRINKING WATER ON THE FAIR GROUNDS.

A great number of people remarked to the Journal about the inconvenience caused by the lack of drinking water fountains on the State Fair grounds. This was one of the features of the Fair which Manager Telfer had up before the board long before the Fair opened, and bids were secured upon sanitary fountains to be placed about the grounds at convenient places. We understand that the money to purchase them would have caused a curtailment in expenditure in other important departments, but even then the fountains might have been purchased, had not a sanitary drinking cup representative from San Francisco put a proposition before the board. This man agreed to furnish a large quantity of sanitary cups, placed in sanitary racks at the various water taps on the grounds, and signed an agreement to that effect. At the last moment the board learned that he would not furnish the cups, and consequently all that could be done at that late hour was to place spring taps on the pipes about the park.

This was one of the improvements which the board was anxious to make, and their plans fell through through no fault of their own.

THE SILO IN CALIFORNIA.

One thing that we do not find at California fairs that is becoming an important adjunct of some of the fairs in the Eastern States is an exhibit of silage machinery and silos. The silo is becoming recognized everywhere as a necessity in live stock and dairy husbandry, yet there are thousands of farmers in this Western country who

do not appreciate the value of the silo as a means of storing feed, and probably hundreds of them do not know what a silo is, notwithstanding the many articles on the subject that have been printed in the farm press. A demonstration on the fair grounds helps better than anything else to prove to interested parties the practical purposes of any contrivance, and a silo exhibit would serve a great educational purpose and stimulate interest in silo building.

Throughout the Eastern States more silos will be filled this year than ever before, and it cannot be long until the interest in silos on this coast becomes more general. Demonstrations by experiment stations and agricultural colleges have shown that silage can be profitably used in beef production as well as on the dairy farm, and it is said that much of the new interest in silo construction is to be found in beef producing areas.

We are glad to know that arrangements will be made for a big silo exhibit at the 1915 exposition, but in the meantime we should be glad to see something in that line at the State Fairs.

A LASTING TESTIMONIAL.

It is good news, indeed, to those interested in the continued success and advancement of the California State Fair that Mrs. Frank Burke will provide the sum of \$100,000 for the construction on the fair grounds of a coliseum of steel and concrete, in accordance with a wish of her late husband.

Frank Burke was a Director of the State Agricultural Society for a number of years, and was always one of the most devoted supporters of the State Fair. He had always intended doing something substantial for the benefit of the Fair, but death came before he carried out his plans, which he left for his widow to complete.

Mrs. Burke has asked Directors B. F. Rush and Charles Paine, who were close friends of Mr. Burke, to take the matter in hand and secure plans, and it is probable that the splendid new building will be completed by the time of the next Fair.

The coliseum will be a valuable acquisition to the fair grounds. It will be a lasting testimonial to the noble and generous donor, and the name of Frank Burke will live long in the memory of those who are interested in the agricultural life of California.

"CONTENTED" OR "RESIGNED"?

The Holstein-Friesian Register recently comments on an editorial in these columns regarding contented cows, and adds a suggestion that is worthy of consideration. The Register says:

"A valued contemporary speaks of 'contented cows,' and goes on to draw two vivid pen pictures, one of the surroundings implied by these words and the other of contrasting conditions. It doesn't take very much, apparently, to make a cow contented; and the things she wants are either free, like air and sunshine, or else she pays liberally for them with the products of her body; like good food, grooming and kindness. How about your Holsteins? Are they 'contented'—or merely 'resigned'?"

PIG POETRY.

The general run of poets, in search of inspiration, seems to have overlooked the possibilities to be found in pigs, although the lowing kine, the fiery steed, Mary's little lamb and the rest of the animal kingdom have come in for a fair share of poetical expression.

When we published "The Duroc Jersey Pig," by John P. Daggs of Modesto,

Cal., in the March Journal we believed that we were publishing one of the best pig poems we had ever read. Our judgment was amply confirmed by the great number of editors who reproduced the poem. One of the latest of these is the editor of the newly twice-a-week Portland Live Stock Reporter, Portland, Ore., who says:

"The Sacramento Live Stock and Dairy Journal, which is considered one of our best authorities on both live stock and dairy subjects, claims to have the great and only original 'Pig Poet,' and we are inclined to think they are about right, as the verses on the 'Little Red Pig,' in our columns lately, attracted much attention at the Finicum sale, and all wanted to know the identity of John P. Daggs. Pig poems made while you wait by calling on the above named, care the Live Stock and Dairy Journal, Sacramento."

THE STATE FAIR.

The 1912 California State Fair was an unqualified success from every standpoint. It more than fulfilled the promises made in the advertising of it, and it was an eye-opener in a great many respects.

It will stand for all time as the one Fair which demonstrated beyond the shadow of a doubt that the farmers of California will support a purely agricultural fair, that good exhibits of live stock, fruits, vegetables and manufactured articles are stronger magnets than the Streets of Cairo, that high-class harness racing does not need gambling to attract the crowds, that the absence of gambling at the race track raised the standard of the class of people who attended the races, and finally this Fair has brought attention forcibly to the need of a large appropriation from the next Legislature to provide for many needed improvements at Agricultural Park.

A POPULAR APPOINTMENT.

The reappointment of C. Allison Telfer as manager of the State Agricultural Society is a particularly popular action of the Board of Directors. During the past year Mr. Telfer has done an immense amount of work in placing the affairs of the society upon a systematic basis, and while his work was not apparent to the general public during the year, yet when Fair time came we all had an opportunity to see the great improvement over previous Fairs. There was a systematic, definite plan about the whole Fair which was apparent to every one, and the fact that the space for nearly all exhibits was inadequate makes the performance of handling the Fair as it was handled all the more creditable.

Mr. Telfer had able assistance in the person of E. Swift Train, manager of exhibits. Although this is Mr. Train's first year he gave exhibitors better service than they have ever had before, and made a host of friends among them by the earnest manner in which he went about anticipating their needs.

The motto of the Humboldt dairymen is, "We lead. Others follow." The first large, up-to-date creamery in the State was built in Humboldt; the first cow testing association was organized here, and has done the dairyman so much good in assisting him to select his cows; and now they have placed the first dairy and agricultural course in the High School at Ferndale, and have shown to the world that dairying and animal husbandry are as valuable assets in the development of youth for the great future as are Greek and Latin and higher mathematics.

Now, we note that other High Schools have adopted the course, and trust that ere long every boy, and girl, too, may have the privilege of studying the dairy cow.

THE LIVE STOCK and DAIRY JOURNAL

Volume 11

SACRAMENTO, OCTOBER, 1912

Number 10

CALIFORNIA'S BEST STATE FAIR

The California State Fair of 1912 at Sacramento, September 14th to 21st, goes on record as the biggest and best yet held. In every respect it excelled every previous State exposition. Record breaking attendance pleased the Directors and managers and the exhibitors alike. A new standard has been set, and from this time on California's annual Fair will, without doubt, receive the recognition that it deserves, both from legislative sources and from the general public. The facilities and accommodations on the fair grounds were overtaxed on every hand, but the management coped with the situation in a very creditable manner.

There was hardly a department that did not overcrowd the space set aside for it, emphasizing more emphatically than ever before the immediate necessity of additional buildings of large capacity. Many exhibits were housed under canvas and in improvised structures, the surplus entries having to be satisfied with this sort of accommodations or nothing at all.

Progress is the order of the day in California, and it is through the State Fair that agricultural development is more truly reflected, perhaps, than through any other medium. So rapid has been the development that it is not surprising that the State authorities have failed to anticipate the trend of progress in connection with the annual exposition, but now that they are face to face with the problem they will undoubtedly take heroic steps to provide for the future.

Mechanical and industrial displays were more extensive than ever before, and much interest was manifested in the exhibits of agricultural implements, especially in those designed to increase efficiency and to save labor on the farm. That the subject of power on the farm is being given more serious consideration than formerly was made apparent by the decided partiality shown the exhibitions of gas engines and the electrical display. Pumping plants and all apparatus allied with irrigation came in for a good share of attention, too.

The mighty tractors were there in variety, and commanded the attention of large groups of spectators, while their operators were demonstrating the prowess of the machines and their ability to turn corners and cross ditches, and we might have seen them climbing trees had there been any large ones handy.

The housewives found much to interest them in the displays of household conveniences and necessities, and art, needle and fancy work, as well as in the varied displays of food products. There was such a diversified display, in fact, that every member of the family could find enough to interest him, and no person needed to go away from the grounds feeling that he had not found something of educational value.

A modern Fair would not be complete without a large automobile show, and this Fair had a good one. Farmers, as well as city folks, spent much time inspecting the models shown by

the representatives of the various manufacturers, and the lively interest manifested by the agriculturists indicated that they are foremost in the consideration of these modern vehicles. From the agents we learned that a majority of the prospective purchasers with whom they came in contact through the Fair were farmers, which indicates that a large proportion of the prosperity of California is enjoyed by the rural population. The interest in automobiles does not daunt the dealers in wagons and buggies, however, and they continue to occupy liberal space and to attract their quota of interested persons.

Twenty-six California counties made displays of horticultural, agricultural, viticultural and industrial products, and the pavilion in which these were grouped was, indeed, a beautiful sight. Few, if any, of the products of California's fertile soil were not included in these county booths. Prizes were awarded to eight counties for the most creditable displays.

Prizes for best displays of exclusive farm products were awarded to three counties.

The amusement features of the Fair were good. The daily Wild West performance seemingly pleased the large crowds, the racing events were of a high order, the horse shows, the fireworks, the chariot races were all interesting, and there was plenty of good, lively music.

But our mission is to set down the facts in connection with the live stock department of the Fair, and lack of space allows us to give only the above brief general mention of the other departments.

The live stock department showed decided advancement, both in point of numbers and in excellence of stock on display. Considered from a geographical standpoint, the entries represented a greater area of Western country than ever before, the states of Idaho, Nevada, Arizona and Oregon being included. Oregon had been represented before by several breeders, and Nevada had sent its agricultural college stock over for two previous Fairs, but Idaho and Arizona stock was shown this year for the first time.

The purebred stock industry is only in its infancy in this State, but each successive Fair sees the live stock department bigger and stronger than its predecessor. Certain it is that the past two years have witnessed notable gains, with an increasing interest and a growing appreciation of the value of the department from an educational point of view.

It was good to note the deep interest manifested by visitors in the various breeds of cattle, horses, sheep and swine, and there was every indication of a growing tendency toward improved live stock. Breeders made very satisfactory sales and came in contact with many prospective customers, and altogether the week was considered a good one from a business standpoint.

If a writer were to do justice to the

live stock exhibit at the 1912 California State Fair, and had a tendency to open up his remarks by a description of the biggest feature of the live stock show, he would be strictly up against it in trying to select the real feature of the show. His thoughts would mill around from horses to sheep to hogs to beef cattle to dairy cattle, and back to horses, and still the feature would be undiscovered.

So we may as well begin right at the beginning of the official program, which, by the way, was a dandy for its first year, and look at the draft horses. Regardless of the fact that there were a high-class lot of Percherons and Belgians in the show, the big feature of the draft horse classes was the Shires. Henry Wheatly has made good his promise to show the best lot of Shires he has ever had, and these with the good Shires shown by Ansel Easton and the individual entries of E. W. Westgate, John McCormack and Mt. Diablo Horse Company, made an exhibit which is a great credit to the exhibitors and to the breed. After judging the Shire classes, Professor Carlyle stated publicly that he did not find a single blemish on a Shire he handled, and that the exhibit was without doubt the best of the breed ever shown on the Pacific Coast.

The Percheron stallions were the first to line up in the show ring, and the 4-year-old class brought out some good ones. Ibidem, the great black owned by California Polytechnic School was placed at the head of the class. Issigeac, who possessed the best conformation of the class, was lacking only in size to place him at the head, while Hista was a very good third.

In the 3-year-old class Jean Bart, a magnificent black sired by Carnot, was a walkover.

The 2-year-old class brought out two good ones in Kantal and Kachet, Kantal finally getting the blue.

In the yearling, Premier of Paicines, a type black in good condition, won over the gray Don, also an excellent individual, but somewhat shorter in the middle than the winner.

In selecting the champion stallion, Professor Carlyle conferred the honor upon Jean Bart, stating that he is one of the best Percherons he has seen on the coast. He had to be a good one to beat Ibidem for championship honors.

In the Percheron mare classes the California Polytechnic School carried away most of the blue ribbons, and the quality of their mares and the colts they show are a credit to their institution.

Henry Wheatley took time enough away from his Shires to bring in the yearling Percheron mare, Salvador Belle, and win a first and Percheron Society of America Special with her.

DRAFT HORSES—OPEN CLASS. PERCHERONS.

Exhibitors—J. Crouch & Son, Sacramento, Cal.; California Polytechnic School, San Luis Obispo, Cal.; Ruby & Bowers, Davis, Cal.; Henry Wheatley, Napa, Cal.;

A. C. Ruby Company, Portland, Ore.; Paicines Rancho, Paicines, Cal.; C. W. Van Gelder, Acampo, Cal.

Stallions, 4 years old and over—First, Ibidem, California Polytechnic School; second, Issigeac, Crouch; third, Hista, Crouch.

Stallions, 3 years and under 4—First, Jean Bart, Crouch.

Stallions, 2 years and under 3—First, Kantal, Crouch; second, Kachet, Crouch. Stallions, 1 year and under 2—Premier of Paicines, Paicines Rancho; second, Don, Van Gelder.

Grand champion Percheron stallion—Jean Bart, Crouch.

PERCHERON MARES.

Mares, 4 years old and over, with foal at foot—One second prize on Dolores Jean, California Polytechnic School.

Mare, 4 years old and over—First, Dolores Babette, California Polytechnic School; second, Udetta, Van Gelder.

Mare, 3 years and under 4—First, Lady Dolores, California Polytechnic School.

Mare, 2 years and under 3—Starlight, California Polytechnic School.

Mare, 1 year and under 2—First, Salvador Belle, Wheatley.

Stallion or filly foal under 1 year—First, filly foal, California Polytechnic School.

PERCHERONS—STATE CLASS.

Exhibitors—California Polytechnic School, San Luis Obispo, Cal.; Gould & Farnham, Roseville, Cal.; Paicines Ranch Company, Paicines, Cal.; C. W. Van Gelder, Acampo, Cal.

Stallions, 4 years old and over—First, Ibidem, California Polytechnic School; second, Malin, Gould & Farnham.

Stallions, 1 year and under 2—Premier of Paicines, Paicines Ranch Company.

Champion—Ibidem, California Polytechnic School.

PERCHERON MARES—STATE CLASS.

Mares, 4 years old or over with foal at foot—First, Dolores Babette, California Polytechnic School; second, Udetta, Van Gelder.

Mares, 3 years and under 4—First, Lady Dolores, California Polytechnic School.

Mares, 2 years and under 3—First, Starlight, California Polytechnic School.

Mares, 1 year and under 2—First, Salvador Belle, Wheatley.

Champion mare—Dolores Babette, California Polytechnic School.

The class of 4-year-old and over Belgian stallions brought out a bunch from which the selection of the best was not easy. Forton, a clean-cut, excellent specimen of the modern type of Belgian was finally placed first over the heavier, more drafty and somewhat coarser Vulcain de la Cabocherie. The big, black Robuste de Thiesies was placed in third position above the remainder of the class, who were all right up close to the winners.

BELGIANS.

Exhibitors—Geo. J. Lohreson, Bethany, Cal.; J. Crouch & Son, Sacramento, Cal.

Stallion, 4 years old and over—First, Forton, J. Crouch & Son; second, Vulcain de la Cabocherie, Geo. J. Lohreson; third, Robuste de Thiesies, J. Crouch & Son.

Stallion, 3 years and under 4—First, Cabochard, J. Crouch & Son; second, Noirhat Beugali, J. Crouch & Son; third, Sultan d'Idier, J. Crouch & Son.

Stallion, 2 and under 3—First, Windzniper, J. Crouch & Son.

Grand champion—Forton, J. Crouch & Son.

In the Clydesdale classes only one individual over 4 years was shown, the balance being young horses. A. C. Ruby & Co. took all honors in these classes.

CLYDESDALES.

Stallions, 4 years old and over—First, Master Middleton, A. C. Ruby & Co.

Stallions, 2 years and under 3—First, Lord Marcus, A. C. Ruby & Co.

Mares, 2 years and under 3—First, Sally Marcus, A. C. Ruby & Co.

And now for the heavy work. When

the class of 4-year-old and over Shire stallions faced Professor Carlyle in the show ring, it was at once evident to even the ringside judge that here was a class calling for keen judgment. There was not a poor individual in the class, and final placing was largely a matter of small details, although the winner, Neuadd Hillside, is a remarkable type of Shire stallion, and fully deserving of his position at the head of the class. He shows up especially well in action. Teuton Gay Lad took second position on account of his superior conformation, and third honors went to Rampton President, who is a great mover and an excellent individual, but was just a bit below the show condition of the two above him. Desford Banker held his position well up in the class, and it is no disgrace for him to stand close below the winners after a year of heavy service.

The 3-year-old class brought out another lot of good ones, Cwman Premier finally taking the head of the class, with Harboro Combination and Mellington Harold crowding close.

For championship honors Neuadd Hillside won comparatively easily over Cwman Premier, the latter having size for his age, but is a trifle plainer than the older horse.

The Shire mare classes were well filled, the feature being the 3-year-old class. This class was another hard one to pick, the choice falling to Woodland Gloaming, with Trip second. Lightsome was placed in third position, and the reason for placing her there instead of further up was so trivial that it only emphasizes the general excellence of the class. She is a remarkably typey Shire mare, with the best middle of any mare in the ring.

The younger classes brought out a string of youngsters who fitted in nicely with the excellence of their elders, and rounded out what is, according to the opinion of the oldest Fair visitors, the greatest showing of Shires ever made on the coast.

SHIRES—OPEN CLASS.

Exhibitors—Henry Wheatley, Napa, Cal.; Ansel M. Easton, Burlingame, Cal.; Ruby & Bowers, Davis, Cal.; John McCormack, Rio Vista, Cal.; E. W. Westgate, Rio Vista, Cal.

Stallions, 4 years old and over—First, Neuadd Hillside, Henry Wheatley; second, Teuton Gay Lad, Henry Wheatley; third, Rampton President, Ansel Easton.

Stallions, 3 years and under 4—First, Cwman Premier, Henry Wheatley; second, Harboro Combination, Henry Wheatley; third, Mellington Harold, Mt. Diablo Shire Horse Co.

Champion stallion—Neuadd Hillside, Henry Wheatley.

Mares, 4 years old and over with foal at feet—First, Rio Vista Belle, John McCormack.

Mares, 4 years old and over—First, Tom's Flower, Henry Wheatley.

Mares, 3 years old and under 4—First, Woodland Gloaming, Henry Wheatley; second, Trip, Ansel Easton; third, Lightsome, Ansel Easton.

Mares, 1 year and under 2—First, Salvador Bounce, Henry Wheatley.

Stallion or filly foal under 1 year—First, Black Hawk Harold, Ansel Easton; second, Black Hawk Merry Boy, Ansel Easton; third, foal exhibited by John McCormack.

Champion mare—Woodland Gloaming, Henry Wheatley.

The exhibits of jacks and jennets was small, but contained a number of good specimens. The first prize jack, Frenchy, is one of the best jacks even shown at the State Fair, and is the sire of the big yearling, Jim Snell, and the good young jennet, Jennie Flood. Olcese & Buchaneu showed a good 2-year-old in Stonewall B., and the quality of these exhibits, when we take into consideration the exceptional quality of the jacks now being brought into the State, promises well for a fine exhibit of California bred jacks and jennets within a few years.

JACKS AND JENNETS.

Jacks, 4 years old and over—First, Frenchy, M. A. Merrill, Willows, Cal.; second, Big boy, Olcese & Buchaneu, Berkeley, Cal.

Jacks, 2 years and under 3—First,

Stonewall B., Olcese & Buchaneu, Berkeley, Cal.; second, Adam B., Olcese & Buchaneu.

Jacks, 1 year and under 2—First, Jim Snell, M. A. Merrill, Willows, Cal.

Jennets, 4 years old and over—First, Lady, Olcese & Buchaneu.

Jennets, 1 year and under 2—First, Pet, Olcese & Buchaneu; second, Jennie Flood, M. A. Merrill.

Mules, matched span 3 years old and over—First, Blue and Dan, Olcese & Buchaneu.

Mules, 2 years old and over—First, John, Olcese & Buchaneu.

Next in order came the saddle horse classes. Last year the writer followed the California fairs and noted the interest displayed by the general public in the saddle horse shows, and has commented frequently upon the value of these exhibits in attracting attendance to the fairs. My estimate of their pulling power was amply justified at the State Fair this year, as anyone will agree who noted the large and appreciative audiences which attended all of the evening shows. The saddle horse exhibits were the best ever seen at the State Fair, and I will go further in my opinion of them as a drawing card this year than I did last, and say that I believe that if a large enough tent could be secured in which to show them, and shows could be held say four nights during fair week, with no admission fee to the tent or seats, and if the fireworks display would be given on the four nights when the horses are not shown and the money saved on that item applied to additional prizes for saddle horses, that such a plan would bring out an exhibit of high-grade saddle horses which would equal, if not excel, the fireworks as a drawing card to bring attendance through the gates, and would at the same time encourage the breeding of one of the most beautiful and useful classes of animals shown at our fairs.

The saddle horses this year were an attractive lot, and were subjected to the judgment of several different judges, whose opinions differed somewhat as to the respective merits of most of them, Don Castano being the most consistent favorite and the sweepstakes winner. Don Castano is a beautifully put up chestnut, full of fire and action.

Lord Denmark, owned and ridden by Mrs. Riggle, found much favor with judges and spectators because of his fine conformation and smooth, even gait.

Jack Rogers, the chestnut stallion owned and ridden by Jas. T. Ragsdale, was a favorite with the audience, and Shield Montrose, with Mr. Davis up, had many admirers.

There is something about the big bay gelding, Gypsy Jim, which appeals to the seeker after the substantial and reliable. He has size, beautiful action and the appearance of an intelligent, even disposition.

The black mare, Noya, owned by Mrs. Thos. L. Johnson, caught the fancy of judges and audience alike by her flashy action and general good appearance in the ring.

The several good ones shown by Adelaide Gillis, the exhibits of the Riding and Driving Club, the excellent horses shown by Mrs. Riggle, and, in fact, the uniform quality of the entire saddle horse show, stamp it as a feature well worth the substantial encouragement of every fair association on the coast.

SADDLE HORSES—FIVE GAITED.

Exhibitors—Jas. T. Ragsdale, Merced, Cal.; Mrs. E. P. Riggle, Piru, Cal.; A. D. Davis, Porterville, Cal.; Adelaide Gillis, Los Angeles; E. A. Bridgford, San Francisco; W. Bernstein, Hanford, Cal.; Dr. W. J. Smyth, Oakland, Cal.; Riding and Driving Club, San Francisco; A. H. Brinton, Woodland, Cal.; W. T. Seson, San Francisco; Miss Irene Matson, San Francisco.

Awards.

Stallion, 4 years old and over—First, Don Castano, Adelaide Gillis; second, Shield Montrose, A. D. Davis; third, Lord Denmark, Mrs. Riggle.

Stallions, 3 years and under 4—First,

King of All, Adelaide Gillis; second, Jack Rogers, Jas. T. Ragsdale.

Stallions, 2 years and under 3—First, Don Pedro, E. A. Bridgford.

Stallions, 1 year and under 2—First, Angelus Denmark, W. Bernstein.

Mares, 4 years old and over—First, Noya, Mrs. Johnson; second, May Day, Jas. T. Ragsdale; third, Marble Chief, Riding and Driving Club.

Mares, 3 years and under 4—First, Acme, E. A. Bridgford.

Mares, 1 year old and under 2—First, Candy Kid, Dr. Smyth; second, Denmark Maid, Mrs. Riggle.

Mares, under 1 year—First, Rain Cloud, Adelaide Gillis; second, Tarna Denmark, Mrs. Riggle; third, Patricia Denmark, Mrs. Riggle.

Geldings, 2 years old and over—First, Gypsy Jim, Riding and Driving Club; second, Lee Rex, Riding and Driving Club; third, Flash, Miss Matson.

Sweepstakes—First, Don Castano, Adelaide Gillis; second, Lee Rex, Riding and Driving Club; third, Gypsy Jim, Riding and Driving Club.

THREE-GAITED SADDLE CLASS.

First, Star, E. S. Heller, San Francisco; second, Lord Denmark, Mrs. E. P. Riggle, Piru, Cal.; third, Rex Mc, Riding and Driving Club, San Francisco.

High school mare—First, Sylvia, Mrs. Leota Zapp, Fresno, Cal.

California stock horse over 14.3 hands—First, Bug, W. Bernstein, Hanford, Cal.

PONIES.

First, Pluto and Proteus, Mrs. Thos. L. Johnson, San Francisco; second, Sweetheart, A. C. Ruby & Co., Portland, Ore.

AMERICAN CARRIAGE HORSES.

Stallion, 4 years old and over—First, Don Castano, Adelaide Gillis, Los Angeles; second, Lord Denmark, Mrs. E. P. Riggle, Piru, Cal.

Stallions, 3 years and under 4—First, King of All, Adelaide Gillis, Los Angeles.

Stallion, 1 year and under 2—First, Angelus Denmark, W. Bernstein, Hanford, Cal.

Stallion with three of his get, either sex—First, Lord Denmark, Mrs. E. P. Riggle, Piru, Cal.

Mare, 1 year old and under 2—First, Denmark Maid, Mrs. E. P. Riggle.

Mare and one foal—First, Dollie Rex, Adelaide Gillis, Los Angeles; second, Jacqueline, Mrs. E. P. Riggle, Piru, Cal.

Foal, under 1 year—First, Rain Cloud, Adelaide Gillis, Los Angeles.

CARRIAGE AND ROAD TEAMS.

Best single animal—First, Tina, Mrs. F. H. Burke, San Jose, Cal.; second, Zomgretta, Mrs. George A. Leavell, Sacramento, Cal.

NOVELTY.

Best single horse, rig and equipment—First, Pluto, Mrs. T. L. Johnson, San Francisco.

Tandem, 3 years old—First, Pluto and Proteus, Mrs. Johnson.

Harness and saddle horse combination, free for all—First, Lee Rex, Riding and Driving Club, San Francisco; second, Lord Denmark, Mrs. E. P. Riggle, Piru, Cal.; third, Don Castano, Adelaide Gillis, Los Angeles.

FIRST NIGHT.

Three-gaited saddle horses—First, E. S. Heller on Star; second, San Francisco Riding and Driving Club on Rex Mc; third, A. H. Brinton on Woodland on Gold Eagle.

Novelty team and equipment—First, Mrs. T. L. Johnson on San Francisco on Pluto and Proteus.

Tandem saddle horses—First, Heller and J. J. Gethin on Star and Chester; second, Mrs. E. P. Riggle on Piru on Jacqueline and Crackerjack.

Jumping contest—First, Mrs. Leota Zapp on Fresno on Sylvia; second, Oscar Romander of Berkeley on Nero; third, Mrs. Zapp on Nero.

SECOND NIGHT.

Saddle class for girls under 16—First, Wm. Matson on San Francisco on Flash, ridden by Miss Irene Matson.

Five-gaited saddle horses—First, R. and D. Club on Lee Rex; second, R. and D. Club on Gypsy Jim; third, Adelaide Gillis on Los Angeles on Don Castano.

Single rig and equipment—Gold medal to R. and D. Club on Chester Chief.

Three-gaited saddle horses under 15½ hands—First, R. and D. Club on Chester Chief; second, Mrs. Riggle on Lord Denmark; third, R. and D. Club on Mexico.

Novelty race—First, Mrs. Zapp on Marvel.

THIRD NIGHT.

Saddle class for boys under 16—First, R. and D. Club on Chester Chief.

Three-gaited saddle horse—First, Heller on Star; second, R. and D. Club on Chester Chief; third, R. and D. Club on Rex Mc.

High school saddle horses—First, Mrs. Zapp on Sylvia; second, Mrs. T. L. Johnson on San Francisco on Noya.

Combination saddle and drive—First, R. and D. Club on Lee Rex; second, Mrs. Riggle on Lord Denmark; third, A. L. Scott on San Francisco on Ena.

Jumping contest—First, Romander on Nuggett; second, Mrs. Zapp on Sylvia; third, R. and D. Club on Artie.

Five-gaited saddle horses—First, Mrs.

Riggle on Lord Denmark; second, R. and D. Club on Marbel Chief; third, Matson on Flash.

FOURTH NIGHT.

Championship, five-gaited saddle horses—R. and D. Club on Gypsy Jim.

Riding tandem—First, Heller and Gethin on Star and Chester; second, Mrs. Riggle on Lord Denmark and Crackerjack.

Driving competition—First, Mrs. Riggle on Crackerjack; second, Gethin on Chester Chief.

High jumping—First, Romander on Nero; second, Mrs. Zapp on Sylvia; third, R. and D. Club on Artie.

It is something of a jump from saddle horses to beef cattle, but as we started out to follow the program we are up to the heavyweights.

THE SHORTHORNS.

The Shorthorns, as well as other beef breeds, were judged by N. H. Gentry of Sedalia, Mo.

The exhibitors were Howard Cattle Co., San Francisco, Cal.; J. H. Glide, Dixon, Cal.; T. B. Gibson, Woodland, Cal.; T. S. Glide, Davis, Cal.; Paicines Ranch Co., Paicines, Cal.; Harbinson Brothers, Sacramento, Cal.; University of Idaho, Moscow, Idaho; University Farm, Davis, Cal.

The Shorthorn display was very much the same as in past years, the Glide, the Howard and the Gibson herds comprising the major portion of it. The two Glide herds and the Gibson herd took the bulk of the ribbons between them, appearing better fitted than the others. The Gibson stock showed exceptionally fine bloom and created much favorable comment. The Glide stock has for years been noted for evenness of high merit, and has lost none of its superb character. Interest centered largely in the placing of the ribbons for the aged bull class and in the class for cows 2 years old and under 3. King Lancaster 2d (316816) was selected to wear the blue in the first-mentioned class in competition with Straight Archer 11th (320754), a splendid roan from the Howard herd, and was made senior champion, but grand championship honors were wrested from him by the junior champion, Greenwood Knight 2d (355801), a growthy junior yearling showing much of breed character and quality. In the class for cows 2 years and under 3 there was an interesting battle between the three beauties, Queen of Greenwood (86633), Lustrous (103451) and Greenwood Bride 2d (86631). The first named was made senior and grand champion. She is broad, deep and symmetrical and of handsome character. Some of the ringside spectators who saw Greenwood Bride 2d last year and admired her as a junior yearling could not reconcile the placing of the comely red behind the two roans.

Gibson's Roselawn Queen 56th (127390), junior champion, is a sweet, tidy heifer pleasing to look upon, and reflects much credit upon the Roselawn family, which seems destined to take an important place in the history of the breed.

The complete Shorthorn Awards were as follows:

SHORTHORNS.

Bulls, 3 years and over—First, J. H. Glide on King Lancaster 2d; second, Howard on Straight Archer 11th.

Bulls, 2 years and over—First, T. S. Glide on Greenwood Knight; second, University Farm on Count Lavender.

Senior yearling bulls—First, Howard on College Count 2d; second, Harbinson on Red Knight.

Junior yearling bulls—First, J. H. Glide on Greenwood Knight 2d; second, University of Idaho; third, Howard on College Count 5th; fourth, Paicines on Hallie's Choice.

Senior bull calf—First, Gibson on Roselawn Lad 55th; second, Paicines on Roan Signet; third, T. S. Glide on Hillcrest King; fourth, Howard on Archie Junior.

Junior bull calf—First, Gibson on Roselawn Lad 60th; second, Paicines on Paicines Council; third, J. H. Glide on Greenwood King; fourth, Gibson on Roselawn Lad 68th.

Cows, 3 years or over—First, T. S. Glide on Mysie Secret; second, Gibson on

(Continued on page 22, column 3.)

THE DAIRY

DAIRY CATTLE AT CALIFORNIA STATE FAIR

Before taking up the individuals in the dairy cattle classes we want to say for the benefit of those of our readers who did not attend the State Fair that they missed seeing the greatest show of dairy cattle ever gathered together in California. We can only tell you how good it was, but if you have the least bit of interest in a dairy cow, even so small as the buying of a pint of milk every morning, it is well worth your while to come and see the wonderful milk producers of the coast next year.

The Morris herd of Holsteins had a crowd of visitors all the week, and the presence of Aralia De Kol and Riverside Sadie De Kol Burke brought many a visitor through the turnstiles.

The Jerseys were admired by many thousands of visitors during the week, and sales of bulls were frequent.

The Guernseys came in for the greatest amount of attention which has been shown them at any time yet. And the interest was not merely a curious one, as a number of good bulls were sold out of the Lathrop herd, and many future buyers met. Mr. and Mrs. Leland, who recently brought a herd of some forty head of registered Guernsey cows to California, were visitors, and have purchased from Chas. G. Lathrop the grand champion Guernsey bull, Kitchener's Corona Boy, to head their herd.

However, let us get back to the show ring and size up the 3-year-old and over Holstein bulls.

That good bull, Tuebie Pietertje Colantha Lad, won comparatively easily from the larger Ignaro Duke. The latter is also a great specimen, and was a mighty good second.

In the 2-year-old class King Segis Pontiac Emperor was an easy first, with Sir Segis Hengerveld De Kol second and Star Youth Korndyke Wayne third.

Three good senior yearlings made up that class, Lorena Korndyke winning. The third bull in this class, Aaltje Sir Pontiac, has developed remarkably in the past few months and gives much promise for his mature form.

The junior yearling class brought out a likely bunch, and honors in this class were well divided among the breeders. Arcula Alcartra Sir Korndyke had a shade on the rest, although both Teake Lyons De Kol and Nevada Sarcastic Challenger were strong candidates for the top position.

The junior champion bull appeared in the senior calf class, in Pietertje Lad. This is a remarkable youngster, and under the development of University Farm should be a hard one to beat at future fairs.

The writer called attention, in the September Journal, to the junior bull calf class about to be shown at the State Fair, and Segis Pontiac De Kol Burke, the great little son of Riverside Sadie De Kol Burke, fulfilled the prediction implied by going to the top of a class of good ones.

In lining up for championship judgment, King Segis Pontiac Emperor and Tuebie Pietertje Colantha Lad presented a problem which would, no doubt, be solved to differing conclusions by different judges. Both bulls are magnificent specimens of the

bred, differing greatly in color and considerably in conformation, yet it is difficult to find any serious flaw in either.

Professor Carlyle finally placed the award upon King Segis Pontiac Emperor, later making him grand champion.

The greatest class among the black and whites was the cow class—4-year-old and over. Ten great females faced the judge in this class, among them the grand champion of last year, the world's record milk cow, another champion of two years ago, the cow who bids fair to establish a new world's record, and six others of great quality.

side De Kol, while the other three awards went to the Morris herd.

In the 2-year-old class Tuebie Pietertje 2d, a heifer not yet in milk, was placed first over De Kol of Valley Mead 2d, a great 2-year-old. Apparently the winner was selected largely because of her show condition, and the flesh which gave her a somewhat rugged appearance as compared with the better dairy type of the second prize cow.

The senior yearling class brought out the junior champion in Chloe Mechthilde De Kol 4th, another good one shown by University Farm.

Tuebie Nevada Sarcastic, an excel-

lent daughter of the great Stafford Mercedes Aaggie Tuebie, took the head of the junior yearling class.

The promising little senior calf, Jane Netherland Segis, was the winner in her class, while in the baby class Miss Segis Blaney did credit to her sire, King Segis Pontiac Emperor.

HOLSTEIN-FRIESIANS.
Exhibitors—A. W. Morris & Sons, Woodland, Cal.; University of Nevada, Reno, Nev.; A. B. Kendall, Modesto, Cal.; Jos. McGillivray, Sacramento; Markofer & Latta and R. Baker, Elk Grove, Cal.; Heenan & Weldon, Sacramento, Cal.; University Farm, Davis, Cal.; H. B. Cowan, Modesto, Cal.; T. J. Gilkerson, Lemoore, Cal.; F. R. Sanders, Mesa, Ariz.

Bulls, 3 years and over—First, Tuebie Pietertje Colantha Lad, University of Nevada; second, Ignaro Duke, McGillivray.

Bulls, 2 and under 3—First, King Segis Pontiac Emperor, Morris; second, Sir Segis Hengerveld De Kol, Gilkerson; third, Star Youth Korndyke Wayne, Heenan & Weldon.

Senior yearling bulls—First, Lorena Korndyke, Morris; second, King Mead, Morris; third, Aaltje Sir Pontiac, Markofer & Latta and R. Baker.

Junior yearling bulls—First, Arcula Alcartra Sir Korndyke, Morris; second, Teake Lyons De Kol, Cowan; third, Nevada Sarcastic Challenger, University of Nevada; fourth, Genesee Lad, Morris.

Senior bull calves—First Pietertje Lad, University Farm; second, Skylark Gerben De Kol, Morris; third, Skylark Netherland De Kol, Morris; fourth, Korndyke Pietertje Tritomia, McGillivray.

Junior bull calves—First, Segis Pontiac De Kol Burke, Morris; second, Nutula Sir Korndyke, Morris; third, entry of Gilkerson; fourth, King Kasteleintje Segis, Morris.

Senior champion—King Segis Pontiac Emperor, Morris.

Junior champion—Pietertje Lad, University Farm.

Grand champion—King Segis Pontiac Emperor, Morris.

Cows, 4 years and over—First, Riverside Sadie De Kol Burke, Morris; second, Stafford Mercedes Aaggie Tuebie, University of Nevada; third, Inka Tritomia 2d, McGillivray; fourth, Petra, Cowan.

Cows, 3 years and under 4—First, Leda Gerben Alcartra, Morris; second, Beatrice Riverside De Kol, Cowan; third, Floa Bergsma Butter Girl, Morris; fourth, De Kol of Valley Mead 2d, Morris.

Cows, 2 years and under 3—First, Tuebie Pietertje 2d, University of Nevada; second, De Kol of Valley Mead 3d, Morris; third, Woodland Wilhelmina 2d, Morris; fourth, Floa Princess, Morris.

Senior yearlings—First, Chloe Mechthilde De Kol 4th, University Farm; second, Aralia De Kol 3d, Morris; third, Pietertje Clyde Korndyke, Morris; fourth, Pietertje Bloom 2d, University Farm.

Junior yearlings—First, Tuebie Nevada Sarcastic, University of Nevada; second, Creamcup Contenta Pontiac, Morris; third, Aralia Mead De Kol, Morris; fourth, Aaggie Netherland Juliana, Morris.

Senior calf—First, Jane Netherland Segis, Morris; second, Nevada Sarcastic Blossom, University of Nevada; third, Miss Korndyke Bergsma Abbekeerk, Morris; fourth, Helen Nye Skylark, Morris.

Junior cow calf—First, Miss Segis Blaney, Morris; second, Tuebie Pietertje Colantha Lass, University of Nevada; third, Miss Korndyke Queen De Kol, Morris; fourth, Aaggie Netherland Walker, Morris.

Senior champion cow—Riverside Sadie De Kol Burke, Morris.

Junior champion cow—Chloe Mechthilde De Kol 4th, University Farm.

Grand champion cow—Riverside Sadie De Kol Burke, Morris.

Aged herd—First, Morris; second, University of Nevada.

Breeder's young herd—First, second and third, Morris.

Calf herd—First and second, Morris.

Get of sire—First, get of Tuebie Pietertje, University of Nevada; second, get of Zady Bergsma Butter Boy, Morris; third, get of King Segis Pontiac Emperor, Morris; fourth, University Farm.

Produce of dam—First, produce of Stafford Mercedes Aaggie Tuebie, University of Nevada; second, produce of De Kol of Valley Mead, Morris; third, produce of Spring Brook Floa, Morris; fourth, produce of Pietertje Bloom, University Farm.

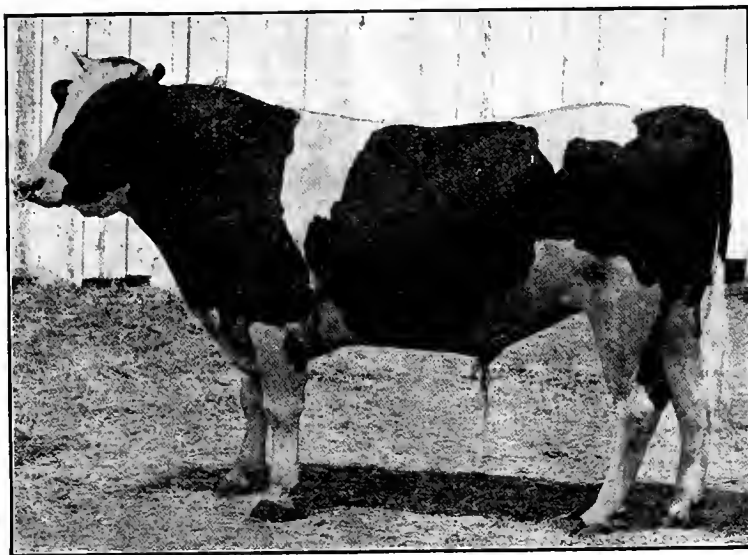
The Jersey classes brought out some great new winners, and last year's champions were dethroned.

In the aged bull class King's Valet was an easy winner, while in the 2-year-old Sonny St. Helier fully justified the judgment of the many admirers he made last year by winning first place.

The senior yearling class brought into the ring the remarkable young Altama Interest, an easy winner, and who finally was made grand champion over King's Valet. The new champion is looked upon as the most promising young Jersey sire on the coast today, and the producing qualities of his ancestors is fully in keeping with his show ring form.

The younger Jersey bull classes were large and of exceptional quality, showing a wealth of material for great show animals for future fairs.

The 4-year-old and over Jersey cow class brought about a reversal of form over the awards of last year. Wanda of Venadera was declared the best of an exceptionally good class, with Golden Tina second, Riolaawn of Oakhurst third and Empress Lass fourth, and



KING SEGIS PONTIAC EMPEROR.
Grand Champion Holstein-Friesian Bull at California State Fair. Owned and Exhibited by A. W. Morris & Sons, Woodland, Cal.

After long and careful deliberation Professor Carlyle placed Riverside Sadie De Kol Burke at the head of the class. Stafford Mercedes Aaggie Tuebie placed second, calved only a day or two before entering the show ring and showed a very slightly inflamed udder. She is of a considerably different type than the winning cow, and her general conformation, enormous, well balanced udder and good marking made her a favorite with many ringside judges. Inka Tritomia, the winner of third position, is a great cow of rather extreme dairy type. Her natural type was somewhat accentuated by the fact that she dropped twin heifer calves only two weeks before entering the show ring, and she was consequently in comparatively poor flesh. Petra, the fourth cow, is also a great cow, but was somewhat short of the other three generally. However, her owner can be congratulated that as a young breeder making his first showing he had a cow worthy of fourth place in a class which Professor Carlyle pronounced as probably the best cow class ever shown in the State, and possibly one whose remarkable quality would not be equaled again in years to come.

This same young breeder followed up in the 3-year-old class by showing the second prize cow, Beatrice River-

side De Kol, while the other three awards went to the Morris herd.

In the 2-year-old class Tuebie Pietertje 2d, a heifer not yet in milk, was placed first over De Kol of Valley Mead 2d, a great 2-year-old. Apparently the winner was selected largely because of her show condition, and the flesh which gave her a somewhat rugged appearance as compared with the better dairy type of the second prize cow.

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rigation.

J. H. HARLAN CO.

WOODLAND, CAL.

HOLSTEINS

Nothing to sell now, but we are
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delivery.

3--BULLS--3

Registered Holsteins of A. R. O. Dams.
Growthy, well marked and bull type. Bar-
gain prices. No heifers for sale at present.

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Santa Cruz, Cal.



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HOLSTEIN CATTLE

The Greatest Dairy Breed

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Prices on Application.

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I am breeding the finest stock in the
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WEST DULEY, Proprietor.

N. E. NEILSEN

VETERINARIAN

Sacramento, California

Office and Modern Hospital—Thirteenth St. bet.
1 and J Streets

for the second time within two hours
a last year's grand champion cow
was left outside the money.

In the 3-year-old class Lemolla's
Belle won first position, and although
she has been in milk for more than
twelve months she shows an excel-
lent udder.

Golden Leda of Sunnybank stayed at
the top of a very good class of 2-year-
olds, and added more laurels to the
get of King's Valet.

The senior yearling class furnished
the grand champion cow, Valet's Gold-
en Biddy of Lockeford. She is a beau-
tiful young cow of ideal type, good col-
or, great udder for her age and a
general all round capacity. She
dropped a heifer calf shortly after
leaving the show ring.

The fact that the Jersey breeders
of the State are holding on to their
precious young females was indicated
in the junior calf class when eighteen
youngsters faced the judge. Poly
Lady Marquis looked a shade the best
and was placed at the blue ribbon
post, Valet's Bright Eyes of Lockeford
second and Lass of Mossdale third.
Hackett had some good calves in this
class, but they lacked in condition and
did not get the recognition which a
little more finish would have given
them.

JERSEYS.

Exhibitors—N. H. Locke & Co., Locke-
ford, Cal.; J. B. Thorp, Stockton, Cal.;
Guy H. Miller, Modesto, Cal.; W. J.
Hackett, Ceres, Cal.; California Polytech-
nic School, San Luis Obispo, Cal.; Univer-
sity of Nevada, Reno.

Bulls, 3 years old and over—First,
King's Valet, Locke; second, Borello's
Golden Laddie, Locke; third, Bruce King,
California Polytechnic School.

Bulls, 2 years old and under 3—First,
Sonny St. Helier, Thorp; second, Grace's
Fox of Venadera, Locke.

Senior Yearling Bulls—First, Altama
Interest, Miller; second, Golden Tina's
Tormentor, Hackett.

Junior yearling bulls—First, Valet's
Golden Lad of Lockeford, University of
Nevada; second, Buttercup's Valet of
Lockeford, Locke; third, Valet's King
of Lockeford, Locke; fourth, Foxy King of
L., Locke.

Senior bull calves—First, Native Daugh-
ter's Valet of Lockeford, Locke; second,
Louise's Sonny, Thorp; third, Marigold
Gentleman, California Polytechnic School;
fourth, Leda's Golden Laddie of Locke-
ford, Locke.

Junior bull calves—First, Philadelphia
Lad of University of California, Univer-
sity Farm; second, Valet's Journalist of
Lockeford, Locke; third, Amethyst King,
Miller; fourth, Flossy's Foxy Lad, Hack-
ett.

Senior champion—King Valet, Locke.

Junior champion—Altama Interest, Mil-
ler.

Grand champion—Altama Interest, Mil-
ler.

JERSEY COWS.

Cows, 4 years old and over—First, Wan-
da of Venadera, Miller; second, Golden
Tina, Hackett; third, Riolaun of Oak-
hurst, California Polytechnic School;
fourth, Empress Lass, Locke.

Cows, 3 years old and under 4—First,
Lemolla's Belle, Locke; second, Amethyst
of Venadera, Miller.

Cows, 2 years old and under 3—First,
Golden Leda of Sunnybank, Locke; sec-
ond, Borello's Golden Lily, Locke; third,
Loleta of Venadera, Miller; fourth, Goldie
of Venadera, Miller.

Senior Yearlings—First, Valet's Gold-
en Biddy of Lockeford, Locke; second,
Salome of Mossdale, Thorp; third, Infu-
nitus Faala, Hackett; fourth, Goldie's
Naomi, Hackett.

Junior yearlings—First, Golden Rose-
bud of Lockeford, Locke; second, Poly
Foxy Queen, California Polytechnic
School; third, Cecelia of Venadera, Hack-
ett.

Senior cow calves—First, Financial
Prospect of Lockeford, Locke; second,
Valet's Handsome Zemola of Lockeford,
Locke; third, Sonny's Benedita, Thorp;
fourth, Aldene of Venadera, Miller.

Junior cow calves—First, Polly Lady
Marquis, California Polytechnic School;
second, Valet's Bright Eyes of Lockeford,
Locke; third, Lass of Mossdale, Thorp;
fourth, Poly Lady Belle, California Poly-
technic School.

Senior champion cow—Wanda of Ven-
adera, Miller.

Junior champion cow—Valet's Golden
Biddy of Lockeford, Locke.

Grand champion cow—Valet's Golden
Biddy of Lockeford, Locke.

Aged herd—First, Locke; second,
Thorp.

Breeder's young herd—First, Locke;
second, California Polytechnic School;
third, Hackett.

Calf herd—First, Locke; second, Cal-
ifornia Polytechnic School; third, Miller;
fourth, Hackett.

Get of sire—First, get of Marigold's
Exile King, Miller; second, get of King's
Valet, Locke; third, get of Margery Gold-
en's Fox, Miller; fourth, get of Bruce
King, California Polytechnic School.

Produce of dam—First, produce of An-
ita of Venadera, Miller; second, produce
of Golden Biddy, Locke; third, produce
of Benedita of Venadera, Thorp; fourth,
produce of Marquis Foxy Belle, Califor-
nia Polytechnic School.

The Guernsey classes showed up
stronger than at any previous State
Fair, and the number of new breeders
and buyers present indicates the
awakened interest which is being
shown in this excellent breed by dairy-
men of the coast. The Lathrop herd
was better than ever this year, and
was brought into competition with the
smaller but high-class herd of J. P.
Kelly and the good herd of Dr. J. W.
Henderson.

The 3-year-old and over bull class
brought out Imp. Lord Kitchener,
whose days as a show bull are past,
but he can retire with honor for his
past winnings and for the great sons
and daughters who will carry his
name and blood on through the prize
winners and record producers of the
breed. In this class he had to yield
first honors to Raymond of Alta Vista,
the great Alta Vista herd bull.

In the 2-year-old class Kitchener's
Corona Boy showed the youthful form
of his great sire, and was placed at
the head of the class, and was later
made grand champion. He has been
purchased by Wm. M. Leland to head
the Idle Wild Guernseys, and his get
will, without doubt, be noted among
the best coast Guernseys in future
shows.

The senior yearling class was final-
ly headed by Mota's Gay Lad, an out-
standing winner, and an individual
who was a worthy opponent of Kitch-
ener's Corona Boy for championship
honors.

Gold Dust of Bella Vista carried off
the blue in the senior calf class, and
is a youngster who promises much in
future development.

The 4-year-old cow class was made
up of a strong collection of good cows
representing three herds. Imp. Gold
Pail 2d looked to be the best of the
bunch and was so placed. Kelly had
two good ones in this class, and they
were placed second and third.

The 3-year-old class furnished the
grand championship cow in Imp. Con-
queror's Primrose, an outstanding
winner.

There was a good class of 2-year-
olds, Imp. President's Nell being the
final winner, with Patience of the
Glen a good second.

In the senior yearling class Maud T.
of Edgewater came up to expectations
and was placed first and was later
made junior champion.

There were a likely lot of young-
sters in the remaining classes with
honors divided among the different
herds.

GUERNSEYS.

Exhibitors—Chas. G. Lathrop, Stan-
ford University, Cal.; Dr. J. W. Hender-
son, Berkeley, Cal.; J. P. Kelly, Mesa,
Ariz.

Bulls, 3 years old and over—First, Ray-
mond of Alta Vista, Lathrop; second,
Imp. Lord Kitchener, Lathrop.

Bulls, 2 years and under 3—First,
Kitchener's Corona Boy, Lathrop; second,
Pilot of the Glen, Kelly; third, Imp. John
of Oakhurst, Henderson.

Senior yearling bulls—First, Mota's Gay
Lad, Kelly; second, Gistana's Mysie Boy
of Avon, Lathrop; third, Kitchener's
Duke, Lathrop.

Junior yearling bulls—First, Kitchener's
Count Sucoette Lad, Lathrop.

Senior bull calves—First, Gold Dust of
Bella Vista, Henderson; second, Lew-
ison's Kitchener Boy, Lathrop; third,
Violet's Pride of Iowa, Lathrop.

Junior bull calves—First, Raymond's
Lad of the Vrangue, Lathrop; second,
Katona's Sequel Masher, Kelly; third,
Flora's Raymond, Lathrop.

Senior champion bull—Kitchener's Co-
rona Boy, Lathrop.

Junior champion bull—Mota's Gay Lad,
Kelly.

Grand champion bull—Kitchener's Co-
rona Boy, Lathrop.

Cows, 4 years old and over—First, Imp.
Gold Pail, Lathrop; second, Imp. Marian
of Culmor, Kelly; third, Imp. Beauty of

the Bailloterie, Kelly; fourth, Golden
State Beauty, Henderson.

Cows, 3 years and under 4—First, Imp.
Conqueror's Primrose, Lathrop; second,
Madeline of Wannest, Kelly.

Cows, 2 and under 3—First, Imp. Pres-
ident's Nell, Lathrop; second, Patience
of the Glen, Kelly; third, Kitchener's
Glen of Alta Vista, Lathrop; fourth, Vir-
gilia of Palmhurst, Henderson.

Senior yearling heifer—First, Maud T.
of Edgewater, Lathrop.

Junior yearling heifers—First, Kitch-
ener's Dainty Lass, Lathrop; second, Walla
of the Glen, Kelly; third, Clementine Belle
of Palmhurst, Henderson.

Senior cow calves—First, Kitchener's
Corona Lass, Lathrop; second, Flora of
Alta Vista, Lathrop; third, Rancho Bo-
nito, Kelly.

Junior cow calves—First, Raymond's
Siegs Finale, Lathrop; second, Raymond's
Richesse, Lathrop; third, Rancho Mor-
ning Rose, Kelly; fourth, Wanda of Bella
Vista, Henderson.

Senior champion cow—Imp. Conqueror's
Primrose, Lathrop.

Junior champion cow—Maud T. of
Edgewater, Lathrop.

Grand champion cow—Imp. Conqueror's
Primrose, Lathrop.

Aged herd—First, Lathrop; second, Kel-
ly; third, Henderson.

Breeder's young herd—First, Lathrop.

Calf herd—First, Lathrop.

Get of sire—First, Lathrop; second, Kel-
ly; third, Lathrop.

Produce of dam—First, produce of Co-
rona of Seaview Farm; Lathrop; second,
produce of Dainty Lass, Lathrop; third,
Henderson.

In the Dutch-Belted classes Frank
Reed Sanders made practically a clean
sweep of firsts and all championships.
This herd is one of the best of the
breed in this country, and has been
selected and bred with great care by
Mr. Sanders.

DUTCH-BELTED.

Exhibitors—Mrs. Jennie Strader, Ceres,
Cal.; U. G. Strader, Ceres, Cal.; Frank
Reed Sanders, Mesa, Arizona.

Bulls, 3 years old and over—First, Uncle
Sam, Mrs. Strader; second, Billy Lake
View, Sanders; third, Dandy, Strader.

Bulls, 2 years old and under 3—First,
David Echo Lad, Sanders; second, Hep-
sey's Hummer, Mrs. Strader; third, Jan-
sen, Strader.

Senior yearling bulls—First, Sutton
Girl's Jap, Sanders.

Junior yearling bulls—First, Dana, Mrs.
Strader; second, Nosa, Strader.

Senior bull calves—First, Caruso of the
Rancho, Sanders; second, Ona, Mrs. Str-
ader; third, Mica, Strader.

Junior bull calves—First, Pacific Jim,
Strader.

Senior champion bull—David Echo Lad,
Sanders.

Junior champion bull—Pacific Jim, Str-
ader.

Grand champion bull—David Echo Lad,
Sanders.

Cows, 4 years old and over—First, Julia
Marlowe, Mrs. Strader; second, Sutton
Girl, Sanders; third, Princess Banty, San-
ders.

Cows, 3 years old and under 4—First,
Belle of the Rancho, Sanders; second,
Helen's Pride, Mrs. Strader; third, Duch-
ess Jones, Strader.

Cows, 2 years old and under 3—First,
Hansje of Valley Farm, Sanders; second,
Panarista, Mrs. Strader; third, Echo Lad's
Orchard Daisy, Sanders.

Senior yearling heifers—First, Fairy
Rose, Sanders; second, Ceolla, Mrs. Str-
ader.

Junior yearling heifers—First, Adora
of the Rancho, Sanders; second, Keota,
Strader; third, Orno, Mrs. Strader.

Senior cow calves—First, Queen of the
Rancho, Sanders; second, Dolly, Strader;
third, Dimple, Mrs. Strader.

Junior heifer calves—First, Vivian,
Strader; second, Pinola, Mrs. Strader;
third, Melba of the Rancho, Sanders.

Senior champion cow—Hansje of Valley
Farm, Sanders.

Junior champion cow—Fairy Rose, San-
ders.

Grand champion cow—Hansje of Valley
Farm, Sanders.

Aged herd—First, Sanders; second, Mrs.
Strader; third, Strader.

Breeder's young herd—First, Sanders;
second, Strader; third, Mrs. Strader.

Calf herd—First, Strader.

Get of sire—First and second, Sanders;
third, Strader.

Produce of dam—First and third, San-
ders; second, Mrs. Strader.

All Ayrshire awards went to Wal-
lace MacDonald, and while his herd
is small it contains some good, typey
individuals, who could perform with
credit in a ring where there is some
competition.

AYRSHIRES.

All awards to Wallace MacDonald, Mesa,
Ariz.

HILLIER'S JERSEYS FROM THE EAST.

The Hillier Jerseys which arrived from the East on August 22d are now at home on Mr. Hillier's ranch at Modesto, Cal., and while we have not had an opportunity to see them yet, they should be good ones from the breeding represented, and as they were selected by F. B. Wulff we feel certain that their individuality is well in keeping with their form on paper.

Mr. Wulff selected thirty-eight head from noted Eastern herds as a foundation upon which to build the Hillier herd. Twenty head were selected from the noted Bellevue Farm, Southington, Conn., and the balance from New York state herds.

To head this herd Mr. Wulff selected King Polo of Bleak House, one of the richest bred bulls in the world. This bull is 2½ years old, and his first, second and third dams and his sire's dam are all world's record cows. In his pedigree are fifty dams with a 7-day record average of 21 pounds 2 ounces. On both sides of his pedigree appears the great Channel King, sire of Angela of Bleak House, the first cow to make 200 pounds of butter during the first two months of a year's test, and the only cow to qualify for three gold medals in one year, winning senior champion gold medal in 1911; Miss Masy of Bleak House, world's record Jersey cow of any age, for 7-day fat record; Bomba of Bleak House, highest confirmed 7-day butter record for any cow of any age; Coomassie of Bleak House, highest two weeks 2-year-old butter record, and Mistress of Bleak House 2d, highest 2-year-old butter record.

To mate this great bull Mr. Wulff selected from the Bellevue Farm herd ten daughters of Gedney Farm Girl's Oxford, the greatest living son of Imp-Oxford Lad, who was a grand champion on the island, and five daughters of The Owl's Duke, who is the highest scoring son of Imp. Spermiel Owl, having a total score of 97.5. Imp. Spermiel Owl has more Register of Merit daughters than any other living Jersey sire. Among the ten daughters of Gedney Farm Girl's Oxford are three young Register of Merit cows who have recently completed their 2-year-old records.

Besides these there are five young Register of Merit cows sired by various noted bulls of the Jersey breed, who have completed their 2-year-old test with a production of from 375 to 525 pounds of butter.

Particularly worthy of mention is Irene Dewdrop, who made the remarkable 2-year-old record of 525 pounds of butter. She is sired by Golden Paul, a noted Eastern bull, and out of one of the highest Register of Merit dams.

The balance of the females in the herd were selected from noted New York state herds, and among them are eight of St. Lambert breeding and eight daughters of Erie Exile, who stands at the head of a prominent herd in New York. He is a son of Imp. Flying Steed, who is half brother to Brookhill Fox, a grand champion in both England and America.

Laura J. Frakes of Amador County, who recently brought some purebred Holsteins out from Colorado, writes the *Journal* that she took to breeding cattle because she was a nervous wreck, and her physician recommended outdoor work. The raising of fine cattle appealed to her, and after a year spent in investigating the merits of various breeds she decided upon the Holsteins as best suited her fancy and her purpose. She will also raise O. I. C. swine and Black Minorca chickens. An account of Miss Frakes' Holstein purchases was given in a recent issue of the *Journal*.

THE EASY MARK.

Said the scrub-bred cow to the high-bred cow:

"Say you are an easy mark, I vow. You eat no more than a scrub like me, You're treated no better than I can see;

Yet you give that farmer three times as much

In payment for board and room and such;

Three times the milk—and it's better, too;

I'd hate to be such a fool as you!"

Said the high-bred cow to the scrub-bred cow:

"I'd like to shirk but I don't know how; I'm not intending to pay so well,

And why I do it I cannot tell; I reckon it isn't for me to say,

I guess I was simply BORN that way! No matter how hard to stop I try,

I keep on boosting the milk supply."

Said the scrub-bred cow to the high-bred cow:

"You're up against it, I'll allow; You're padding the farmer's increment,

While I'm not making the dub a cent. I know this much—if I were he,

I'd banish all scrawny cows like me Who eat as much as their betters can

And bunco their board from the farmer man.

"But I'm not the farmer and so I'm here,

Eating my head off year by year, And I'll do it as long as I can, I vow,"

Said the scrub-bred cow to the high-bred cow!

—Berton Braley, in *Farm and Fireside*.

The Live Stock and Dairy Journal—B. H. Rawl, chief of the Dairy Division of the United States Department of Agriculture, writes that Mr. Bothell of that division will probably take charge of the milk and cream division of the Pacific International Dairy Show to be held in November.

The State Health Office has been requested to make the chemical and bacteriological milk tests during the show. A cooler has been provided where the milk will be kept at a temperature of 34 degrees. The milk and dairy products division of this show will not be its smallest feature. The application for entry blanks in this department indicates a splendid interest over the territory covered by the show. The sales of purebred and grade dairy cattle will prove attractive, as there is an immense demand for cattle of quality, and especially those that are available for milking.

Letters being received indicate that a number of exhibitors at the National Dairy Show at Chicago will send their animals to the Pacific International at North Portland. The National dates are October 24th to November 2d, and the Pacific International dates are November 18 to 23d, thus giving the exhibitors at Chicago practically sixteen days to reach North Portland.

Low rates have been granted from all points in Oregon, Washington and Idaho, and California will probably be included. D. O. LIVELY. North Portland, Ore.

In the Dairy Department of this issue G. O. Hillier of Modesto offers for sale six grand-daughters of Imp. Flying Steed, bred to freshen in January. When Mr. Wulff was in the East selecting the Hillier foundation herd he found that he lacked a few head to fill his second car, and selected these choice young females feeling certain that they would find ready demand in California. Good Jersey females are hard to buy in California, for the owners of good ones can hardly be induced to put a price upon their stock, and these young cows will undoubtedly be bought up quickly.

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The very best and highest authorities in the land have written a number of chapters especially prepared for this handbook upon a wide range of dairy subjects.

Dr. Coburn, Secretary of the Kansas Department of Agriculture, the great alfalfa expert, has written a chapter on ALFALFA.

Dr. Alexander, Professor of Veterinary Science, University of Wisconsin,

discusses DAIRY COW DISEASES AND THEIR PROPER TREATMENT.

Prof. Hugh G. Van Pelt, the Iowa State Dairy Expert, and one of the Editors of *Kimball's Dairy Farmer*, has contributed a most interesting discussion on PROPER DAIRY FEEDING AND BALANCED RATIONS.

Dr. Burkett, Editor of the *American Agriculturist*, tells about the Most Suitable DAIRY CROPS, and other widely known authorities discuss SOIL FERTILITY, DAIRYING FOR PROFIT, FARM BUTTER MAKING, SILOS AND SILAGE, etc., etc.

A series of photographs illustrating the desirable points in selecting a dairy cow are shown, and also photos of representative cows of the various well-known dairy breeds, together with statements from the secretaries of the various dairy cattle associations setting forth the claims for consideration of each breed.

The HANDBOOK also contains much general information such as tables of weights and measures, silo capacities, etc., that every dairymen at some time or other has occasion to refer to.

While the DE LAVAL DAIRY HANDBOOK covers the various phases of dairy farming most completely, it is in no wise technical, but is written in plain every-day language so that even the children can understand it.

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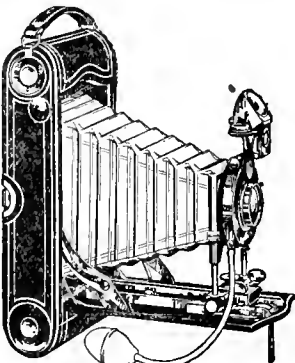
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Butter and Cheese Scoring Contest, State Fair, 1912, Fifth Entry California Educational Butter Scoring Contest.

The butter and cheese scoring contest at the Fair was one of the largest and best ever held in connection with a California State Fair, not only in the number of entries, but in the general interest taken. Compared with the number of exhibits which are sent to some of the large Eastern fairs, the exhibit would perhaps fall behind in the showing made, but it must be remembered that Wisconsin, Minnesota and other large dairy states have many times the number of creameries and cheese factories which are found in California. With the development of the dairy and creamery industry, and the progress which is rapidly being made in these lines, California's future is most promising, and within a few years her reputation for high-grade dairy production and dairy products will be unsurpassed.

At the State Fair contest there were the usual three divisions of dairy products, with the following number of entries: Fresh butter, 47; Export butter, 3; cheese, 20. There was one exhibit under the class calling for the best and most extensive display of dairy products. Among the butter exhibits were some very fine cubes, both in quality, workmanship and package. The most general criticism offered on the butter was under the head of body. Fully half of the entries showed body defects in some degree, and several were so bad as to necessitate extremely heavy cuts. Without any knowledge of the methods of manufacture, it is impossible to give reasons for this, but we are lead to believe that a good many makers departed from their established methods in their desire to do a little better than usual, with the above result. No doubt warm weather conditions were partly responsible also. Body in butter is something which demands the careful attention of every buttermaker who desires to make a good, marketable product. This is true of the other points affected by workmanship, for when cuts are made for defective body, color, salt and package, the total score is reduced by a number of points. A good flavor is essential, but along with this must appear the results of perfect methods. The butter was scored by W. B. Thurston, Federal Dairyman, San Francisco, E. H. Hagemann and Leon M. Davis of the University Farm, Davis.

The following list gives the scores of 90 and above. These scores will be accepted for the fifth entry of the California Educational Butter Scoring Contest.

Class 1—Fresh Butter.

Buttermaker.	Creamery.	Location.	Score.
H. Ostergard	Siskiyou Creamery	Greenview	95
Peter Peterson	Sunset Creamery	Ladeta	94 1/2
Anders Jensen	Castroville Creamery	Castroville	94
V. Baciarini	Suisun Creamery	Suisun	93 3/4
W. D. Bailey	Los Angeles Creamery Co.	San Luis Obispo	93 1/2
Hans L. Beck	Danish Creamery	Fresno	93 3/4
W. F. Wagoner	Penn Valley Creamery	Fernley	93
L. N. Frame	Laupenhelm Creamery	Hardwick	92 3/4
P. M. Becker	Grizzly Bluff Creamery	Grizzly Bluff	92 3/4
C. E. Haley	Eclipse Creamery	Beatrice	92 3/4
Geo. M. Foltz	Dixon Creamery	Dixon	92 1/2
N. Christensen	Laton Co-operative Creamery	Laton	92 1/2
J. L. McDowell	Dairymen's Co-operative Creamery	Tulare	92 1/2
Richard Nelson	Jarvis Creamery	Gleno	92
M. S. Beck	Manchester Creamery	Manchester	91 1/2
Geo. Hartson	Fountain City Creamery	Merced	91 1/2
G. R. Chambers	Taylorville Creamery	Taylorville	91 1/2
Peter Petersen	Gold Nugget Butter Co.	Hollister	91
Axel Ravn	Crystal Cream and Butter Co.	Sacramento	91
J. T. Raitt	Sunflower Creamery	Porterville	91
Geo. Gaskler	Cottonwood Creamery	Cottonwood	90 1/2
John Wolfe	Santa Ysabel Creamery	Paso Robles	90 1/2
H. H. Whitney		Cedarsburg, Wis.	90 1/2
J. V. Canham	Western Meat Company	San Francisco	90 1/2
G. H. Nielson	Kern County Creamery	Bakersfield	90 1/2
Arnold Macdon	Salinas Creamery	Salinas	90 1/2
R. W. Hawkins	Delano Creamery	Delano	90
G. W. Wright	Woodland Creamery	Woodland	90
R. Langner	Dairy Delivery Company	Gustine	90
P. Petersen	McFarland Creamery	McFarland	90
J. Clausen	Riverdale Co-operative Creamery	Riverdale	90

The following entries of fresh butter arrived late, and were given complimentary scores only:

Buttermaker.	Creamery.	Location.	Score.
N. Pedersen	Visalia Co-operative Creamery	Visalia	93 1/2
Chas. Berg	Rose City Creamery	Chico	93 1/2
J. D. Bailey	Dairy City Creamery	Gridley	92 3/4
L. B. Gurney	University Farm Creamery	Davis	92 1/2
M. Simonsen	Diamond L. Creamery	Sanger	91 1/2
Chas. A. Johnson	Ambrosia Cream Company	Napa	91

Class 2—Export Butter.

Best package and quality suited for export:

Buttermaker.	Creamery.	Location.	Score.
J. V. Canham	Western Meat Co.	San Francisco	93
P. Petersen	McFarland Creamery	McFarland	92

Late entry. Complimentary score:

Buttermaker.	Creamery.	Location.	Score.
N. Pedersen	Visalia Co-operative Creamery	Visalia	92 1/2

The cheese was scored by W. B. Thurston and E. H. Hagemann, those entries scoring 90 and above being as follows:

Exhibited by.	Location.	Score.
A. J. Schmelzer	Tillamook, Ore.	98
J. V. Canham	San Francisco, Cal.	96
E. A. Vieregutz	So. Kaukauna, Wis.	95 1/2
Diamond Creamery	Cayucos, Cal.	93
C. J. Russell	Bieber, Cal.	93
T. B. Sperber	Gilroy, Cal.	93
Gregory Giacomizzi	Soledad, Cal.	92
Gregory Giacomizzi	Soledad, Cal.	91
J. M. Pura	Soledad, Cal.	91
Joseph Hosang	Gilroy, Cal.	91
Joseph Hosang	Gilroy, Cal.	91
Joseph Hosang	Gilroy, Cal.	91
Joseph Hosang	Gilroy, Cal.	91
Joseph Hosang	Gilroy, Cal.	90 1/2
Joseph Hosang	Gilroy, Cal.	90

Regarding this exhibit Mr. Hagemann stated that "the judges worked under a slight handicap, in that the Cheddar, California and other types had to be scored in one class. The highest scoring cheese was very fine, as the score would indicate. Many of the California cheese entries gave evidence of the makers not giving the careful attention to their work which should have been given it. This is true of California cheesemakers, and other faults are that the work is rushed too much in the making, and that cheese is often placed on the market too soon." Body and texture in cheese exert a market influence on its salability, which emphasizes the need of watching carefully those details of manufacture which influence these points.

The one entry in the class calling for the best and most extensive display of dairy products came from Mr. J. V. Canham, Western Meat Co., San Francisco, and consisted of the following: One cube of fresh butter, twelve cans of export butter, twenty prints and two cheese. Respectfully submitted, LEON M. DAVIS, University Farm, Davis, September 23, 1912.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

FIRST ANNUAL SALE.

80 Holsteins 80

STERLING, ILLINOIS

October 24, 1912

70 COWS AND HEIFERS.
10 BULLS.

All registered, tuberculin tested, representing some of the greatest families of the breed. Most of the cows have A. R. O. records from 20 to 24 pounds. Many of the heifers are from A. R. O. dams. All the females of a breeding age are bred to our great herd bulls.

Sir Netherland Cornucopia, whose two nearest dams average 30 lbs. butter and who has 12 A. R. O. daughters, all as 2-year-olds, and a son at 2 years of age who was Grand Champion Bull at the Illinois State Fair in 1911. All from his first crop of calves.

Prince Hengerveld Segis, whose two nearest dams average 31 lbs. butter and 17 nearest dams over 25 lbs. butter. His first crop of calves are extremely promising.

King Cornucopia Hengerveld Segis, whose four nearest dams have records from 30 to 34 lbs., whose six nearest dams average almost 29 lbs. butter and whose 17 nearest dams average over 26 lbs.

Several very choicely bred young bulls. They are herd leaders.

WOODLAWN FARM,

Send for Catalog. Sterling, Ill.

Bigger Stock Profits

Mix cut roots with dry feed, double its value. Roots have their place in the feeding economy of every barn and stable. Keep your stock healthy—they pay bigger profits on less feed. The

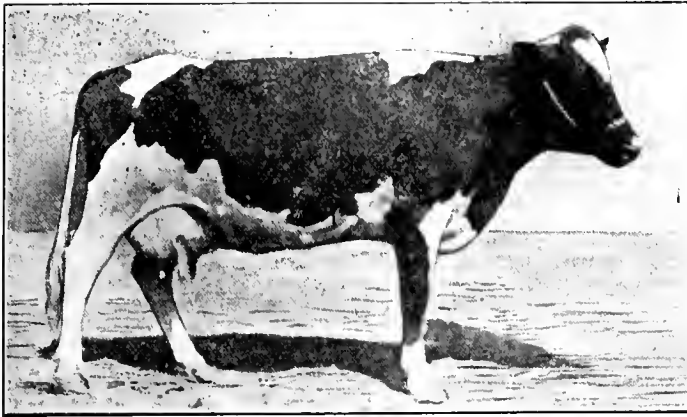
Banner Root Cutter is only machine making the "Won-Choke Curve" feed from roots, etc. Self-feeding; cuts fast and easy; 7 sizes for hand or power. Low prices. Book free. Address

O. E. Thompson & Sons, Ypsilanti, Mich.
Baker & Hamilton, San Francisco & Sacramento

The suggestion contained in the circular of the American National Live Stock Association, published in the last issue of the Journal, that those interested in the live stock industry should make it their personal business to see that all candidates for Congress are pledged to a fair and equitable treatment of the industry with regards to the tariff and other legislation is a good and timely one. Dairymen will do well in taking up with the nominees for congressional seats the oleomargarine matter at a time when they are soliciting support in furtherance of their ambition to serve their country, as it is often the case that a much more satisfactory understanding can be had before election than after.

It is gratifying to note reports from the State Farm at Davis that the attendance upon the short courses and for the regular term will be larger this year than ever before. It indicates that the people of California are beginning to realize the splendid opportunities for agricultural education offered by the Farm.

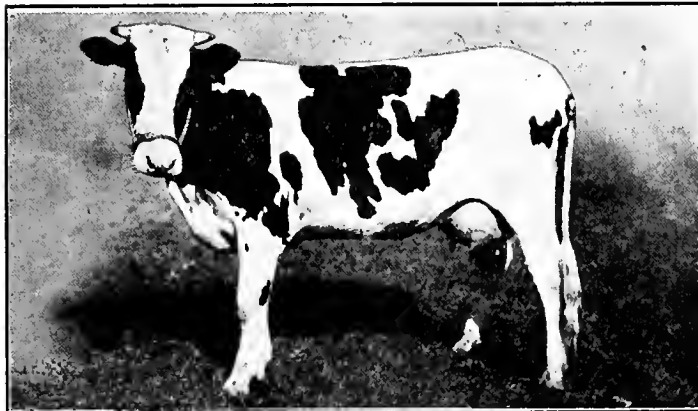
The demonstration of the Hinman milking machine was largely attended on the State Fair grounds. Some of the best purebred Jerseys on the grounds were milked during the week regularly, and the demonstration showed conclusively that in nearly all instances the cows gave down their milk as readily as when milked by hand, and that this machine has overcome the fault of some earlier machines, in that it milks clean. This was shown when the owners of the Jerseys attempted to strip the cows after the machine had been disconnected, and found to their surprise that in nearly all instances the machine had done its work thoroughly.



Sadie De Kol Acme, First in Aged Cow Butter-Fat Contest. Owned by A. W. Morris & Sons, Woodland, Cal.



Leda Gerben Alcartra, First in 3-Year-Old Class Butter-Fat Contest A. W. Morris & Sons, Woodland.



Tuebie Pietertje Carren Fidessa, First in 2-Year-Old Class Butter-Fat Contest. University of Nevada.

THE FIVE-DAY MILKING CONTEST.

The five-day milking contest held at the State Fair resulted in a battle royal between the Holsteins and the Jerseys. In the aged classes the result was practically a tie, the Holstein cow, Sadie De Kol Acme, owned by Morris, producing a total of only a hundredth of a pound of butter-fat more than the Jersey cow, Wanda of Venadera, owned by Miller. At the beginning of the contest the Jersey cow had the lead, and up to the very last minute the result was in doubt. Perhaps never before has a milking contest been decided upon such a close margin. In the second class entries were all Morris Holsteins, but in the class under 3 years there was some very keen competition, the honors being captured by a Nevada Holstein.

Following is a detailed report of the results:

Four Years Old and Over—			Totals.	
Name.	Breed.	Owner.	Lbs.Milk.	Lbs.Fat.
Sadie De Kol Acme	Holstein	Morris & Sons	330.2	12.436
Wanda of Venadera	Jersey	Guy H. Miller	211.9	12.426
Wilhelmina Gerben De Kol.....	Holstein	Morris & Sons	312.1	12.251
Aralia De Kol of Riverside.....	Holstein	Morris & Sons	322.1	11.669
Orlita of Venadera	Jersey	Guy H. Miller	179.8	10.210
Aralia De Kol	Holstein	Morris & Sons	217.2	8.354
Three Years Old and Under 4—				
Leda Gerben Alcartra.....	Holstein	Morris & Sons	294.8	11.194
Aralia De Kol of Valley Mead 2d.....	Holstein	Morris & Sons	288.2	10.707
Willie Alcartra	Holstein	Morris & Sons	289.6	9.251
Under 3 Years—				
Tuebie Pietertje Carren Fidessa.....	Holstein	Unv. of Nevada	245.0	9.692
De Kol of Valley Mead 3d.....	Holstein	Morris & Sons	311.7	9.234
Aralia De Kol of Venadera	Jersey	Guy H. Miller	176.8	9.123
Woodland Wilhelmina 2d.....	Holstein	Morris & Sons	227.0	7.408
Lady Benedita	Jersey	J. B.-J. E. Thorp	122.9	5.210

DEFINITIONS OF FEEDING MATERIALS.

Meal is the clean, sound, ground product of the entire grain, cereal or seed which it purports to represent. Provided, that the following meals, qualified by their descriptive names, are to be known as, viz:

Corn Germ Meal is a product in the manufacture of starch, glucose and other corn products, and in the germ layer from which a part of the corn oil has been extracted. Linseed Meal is the ground residue after extraction of part of the oil from ground flax-seed.

Grits are the hard, flinty portions of Indian corn without hulls or germs.

Hominy Meal, Hominy Feed or Hominy Chop is a mixture of the bran coating, the germ and a part of the starchy portion of the corn kernel.

Corn Feed Meal is the sifting obtained in the manufacture of cracked corn and table meal made from the whole grains.

Corn Bran is the outer coating of the corn kernel.

Wheat Bran is the coarse outer coatings of the wheat berry.

Shorts or Standard Middlings are the fine particles of the outer and inner bran separated from bran and white middlings.

Shipstuff or Wheat Mixed Feed is a mixture of the products other than flour from the milling of the wheat berry.

Red Dog is a low grade wheat flour containing the finer particles of wheat bran.

Oat Groats are the kernels of the oat berry with the hulls removed.

Oat Shorts are the covering of the oat grain lying immediately inside the hull, being a fuzzy material carrying with it considerable portions of the fine, floury part of the groat obtained in the milling of rolled oats.

Oat Middlings are the floury portion of the groat obtained in the milling of rolled oats.

Oat Hulls are the outer coverings of the oat grain.

Rice Hulls are the outer covering of the rice grain.

Rice Bran is the cuticle beneath the hull.

Rice Polish is the finely powdered material obtained in polishing the kernel.

Flax Plant By-Product is that portion of the flax plant remaining after the separation of the seed, the bast fiber and the portion of the shives, and consists of flax shives, flax pods, broken and immature flax seeds and the coricle tissue of the stems.

Buckwheat Shorts or Middlings are that portion of the buckwheat grain immediately inside of the hull after separation from the flour.

Blood Meal is ground dried blood. Meat Scrap and Meat Meal are the ground residues from animal tissue, exclusive of hoof and horn. If they contain any considerable amount of bone, they must be designated meat and bone scrap, or meat and bone meal. If they bear a name descriptive of their kind, composition or origin they must correspond thereto.

Cracklings are the residue after partially extracting the fats and oils from the animal tissue. If they bear a name descriptive of their kind, composition or origin they must correspond thereto.

Digester Tankage is the residue from animal tissue, exclusive of hoof and horn, specially prepared for feeding purposes, by tanking under live steam, drying under heat and suitable grinding. If it contains any considerable amount of bone it must be designated

digester meat and bone tankage.

Brewers' Dried Grains are the dried residues from cereals obtained in the manufacture of alcohol and distilled liquors. The product shall bear a label designating the cereal predominating.

Breeders' Dried Grains are the dried residue from cereals obtained in the manufacture of beer.

Malt Sprouts are sprouts of the barley grain. If the sprouts are derived from any other malted cereal, the source must be designated.

Alfalfa Meal is the entire alfalfa hay ground, and does not contain an admixture of ground alfalfa straw or other foreign material.

Chop is a ground or chop feed composed of one or more different cereals or by-products thereof. If it bears a name descriptive of the kinds of cereals, it must be made exclusively of the entire grains of those cereals.

Screenings are the smaller imperfect grains, weed seeds and other foreign materials having feeding value, separated in cleaning the grain.

BRISK DEMAND FOR DAIRY STOCK

Interest in dairy cattle was never so marked in California as at the recent State Fair. Every breed came in for its share of admiration, and it was not merely an admiration of good cattle, it was a keen interest in choosing the best with a view to buying on the part of many people.

A. W. Morris & Sons sold nine bulls at prices ranging from \$350 to \$500, two 5-months-old calves each bringing the latter figure.

A number of fine young Guernsey bulls were sold out of the Alta Vista herd, owned by Chas. G. Lathrop, Stanford University, and the grand champion Guernsey bull, Kitchener's Corona Boy, goes from the Alta Vista herd to Idle Farm herd, owned by W. M. Leland, Turlock, Cal.

Sales of Jersey bulls were numerous, all the breeders getting a share of business.

It would seem that a great many dairymen are at last beginning to realize that there is something in having a good bull at the head of their herds, and we feel that before another year has passed the self-evident truth of the value of the purebred dairy sire will have revealed itself to many more of our dairymen readers.

HEENAN & WELDON SALE OF HOLSTEINS

The first annual sale of Holsteins by Heenan & Weldon of Sacramento at the State Fair, September 21st, was somewhat of a disappointment to the promoters. Mose of the heifers offered had been bred in the East to some of the best bulls of the breed, and in almost every instance Dr. Weldon offered to buy the calf to be dropped, if a heifer, when 4 months old, for \$125. The offer proved an inducement to several of the bidders, who bought with that understanding. The stock had arrived from the East only a week before the sale, after having been fifteen days on the cars, and it was in anything but attractive condition, which accounts to a considerable extent for the lack of enthusiasm of the large number of interested persons in attendance.

The national forests provide range during the great part of the year for a considerable portion of the stock produced in the Western States. The experts of the department believe that when the ranges which were denuded by many years of improper use are restored to a normal condition of productivity it will be possible to provide feed for a much larger number of stock without injury to forests. This would benefit both the stock growers and the consumers of meat.

MINUTES OF DAIRY CONGRESS AT STATE FAIR GROUNDS.

In response to a call issued by the State Agricultural Society, at the request of Mr. John T. Bramhall of Sacramento, some two dozen dairymen representing many sections of the State, met in the horse show tent at 10:30 a. m., September 20th. Mr. Bramhall had asked Leroy Anderson of the dairy division of the College of Agriculture to preside, and the meeting was called to order by him. In opening the discussion, the Chairman introduced Mr. Bramhall, who explained the object of the congress, viz., to discuss means of arousing a greater community interest among dairymen. The Chairman spoke of the importance of the dairy industry, and of the good work in local organization in Tulare, Kings and Humboldt Counties.

Hon. J. W. Guiberson of Corcoran addressed the meeting and directed its attention to the need of some State dairymen's organization. Mr. Guiberson is President of the Kings County Dairymen's Association. Other gentlemen who spoke were Mr. John T. Bramhall, dairy investigator for the Santa Fe Company, W. E. Elliott of Loleta, representing the Humboldt County Dairymen's Association; Guy H. Miller of Modesto, President of the California Branch Educational and Co-Operative Union; Warren B. Thurston of San Francisco, Dairymen United States Dairy Division, Department of Agriculture; A. Poorman, Dairymen at Riverside; C. L. Hughes of Sacramento, Manager of the Live Stock and Dairy Journal; C. B. Messenger of Los Angeles, editor of the California Cultivator, and D. J. Whitney of San Francisco, associate editor of the Pacific Rural Press.

All spoke strongly in favor of a state wide organization of dairymen, and after thorough discussion a temporary organization was effected by the election of J. W. Guiberson of Corcoran, President, and Leroy Anderson of Berkeley, Secretary. Upon motion, duly seconded and carried, the President was authorized to appoint a committee of five, in addition to himself as Chairman, upon organization and resolutions, this committee to report at Turlock on October 18, 1912, on the occasion of the convention of the California Creamery Operators' Association. The meeting then adjourned to meet at Turlock on October 18th. After adjournment the President appointed the following to serve on the organization committee: Guy H. Miller, Modesto, Stanislaus County; Fred H. Daniels, Alameda; W. E. Elliott, Loleta, Humboldt County; J. P. Ferguson, Turlock, Stanislaus County, and a member of the Tulare County Dairymen's Association to be named later. This committee is requested to meet in Turlock Thursday evening, October 17th at 8 o'clock.

LEROY ANDERSON,
Secretary.

The Live Stock and Dairy Journal—

I wish to compliment you upon the improvement you have given your paper during the past year.

As dairying is the one thing which will change a desert into beautiful green fields, lowing herds and happy and contented families, so should dairying be given a leading place in the farm journals of our country.

I think the picture scheme appeals strongly to most of your readers, especially those at a distance who do not have the opportunity to visit the different noted herds of the State.

I note that the Holstein breeder is rushing things just now (on paper) while through Humboldt it is difficult to find a herd of cows with Holstein blood prominent. The Jersey and Guernsey have become so firmly placed on the butter throne that no

black-and-white will cause them to abdicate.

You have hit the keynote in your Purebred Sire League. As the old adage goes, "The bull is half the herd." In fact, he is more than half, for a cow can not improve herself through her offspring, but a bull of proper type and breeding can improve the offspring of a cow.

As like begets like, or like some ancestor, when you have a bull of pronounced breeding and individuality he can not help but stamp his class on his offspring.

Of course, we have the law of variations, working in the direction of least resistance, which is usually on the weaker side, but according to Mendel's Law of Heredity, the stronger predominates through not only the first, but succeeding generations.

It has been said that fortunate is he who in a lifetime of successful breeding owns one really good bull. The trouble with too many breeders is that they discard a bull before his worth is really proven.

Most heifers show what they are made of with first calf, although some do not come into their own until the second or third calf.

The old saying, "Be sure you are right and then go ahead," is just as applicable to breeding as any other business proposition. Be sure you get the right class of cattle. Be sure you get the good, strong individuals, those which have the true dairy type and strong characteristics of the breed, and then go ahead, and they will breed on and on and on.

P. R. B.

Humboldt County.



Valet's Golden Lad of Lockeford, First Prize Junior Yearling Jersey Bull. Owned by University of Nevada, Reno, Nevada. This Bull is a Full Brother to the Grand Champion Jersey Cow at the California State Fair.

THE FERNDAL FAIR.

The Live Stock and Dairy Journal—The Ferndale Fair opened Tuesday, September 16th, with the finest of weather, lasting the entire week. The showing of live stock was good. Jerseys predominated in the dairy cattle exhibits, while in the swine classes Poland Chinas, Berkshires and Chester Whites were shown. Two pens of exceptionally good sheep were the extent of the sheep show. The horse show was good—in fact, Humboldt is to be congratulated on the showing of live stock made, taking into consideration that much of the quality has been attained through breeding up from the stock which has been in the county for some time.

The stock was not highly fitted nor trimmed up as we see them at our larger fairs, but there were entries of good stock in breeding condition in nearly all the classes.

The exposition building was very nicely decorated, a canopy of evergreen having been fashioned to suspend above the entire floor space, and the display booths were decorated to make a harmonious color effect.

The fair drew a very large attendance—in fact, the gate receipts show the largest number of paid admissions of any fair ever held at Ferndale, and this is their seventeenth annual.

State Dairy Inspector Watson has a sanitary milk house built on the fair grounds, the merits of which were argued pro and con by the dairymen

who visited the fair, and the general opinion is that the building is a good one, and a number of dairymen are going to model their own milk houses after it.

Mr. Watson is doing very conscientious work for the department which he represents, and has found it necessary to bring about some arrests in the county.

Professor Kent of Oregon Agricultural College judged the live stock, and on Tuesday evening was tendered a banquet by the Dairymen's Association. At the conclusion of the spread Henry F. Harbers of Waddington, in a few well chosen words, introduced Professor Kent.

Professor Kent paid a high tribute to the dairymen of Humboldt County for the progress they have made in the last few years, emphasizing the great importance to the county of the dairy industry, and gave figures to show the magnitude to which the industry has grown upon the Pacific Coast.

Professor Kent also spoke upon the advantages of community breeding, and stated that it would be to the advantage of dairymen to confine the herd to one breed and thereby raise them to the highest point of perfection, a course which would result in the widespread fame of Eel River cattle.

Professor Kent concluded his remarks with the following tribute to the cow: "Grand and noble beast! Of all the animal friends to man, she is the greatest. To her we owe the most."

"Examine into all the channels of commerce into which she enters and note the result should she be blotted out. A Sunday stillness would pervade the stockyards industry of our great cities, and grass would grow in our streets. Fifty per cent of the trains of freight that travel the continent from ocean to ocean would be side-tracked, for there would be nothing for them to do; 50 per cent of our laborers would receive no pay on Saturday night, and tables would be bare of the greatest luxuries with which they are now provided.

"Oh, you who would abuse the cow! I wish that I might, as you sit down to your midday meal, slip up and remove from the table all that the cow has provided for you. I'd take the cup of milk waiting by the baby's chair; I'd take the cream, the butter, the steak, the cheese, the cream biscuit, the smoking roast, the custard pie and leave you to make a meal of potatoes, beets, pickles and toothpicks. "There is no other animal like the cow. There is not a thing from her nose to her tail that has not been subjected to the uses of man. We use her horns to comb our hair, her skin is on our feet, her hair keeps the plaster on our walls, her hoofs make glue, her tail makes soup, she supplies our milk, our cream, our butter, and her flesh is the great meat food of our nation.

"We use her blood to make our sugar white, her bones are ground to fertilize our soils, and even her paunch, which she herself has put through the first chemical process necessary for the production of the best white card board. And it has recently been discovered that this board or paper can be made into the finest quality of false teeth.

"No other animal works for man both by day and by night. By day she gathers her food and by night, while man is asleep, she brings it back to rechew and convert it into all of these things of which I speak."

R. W.

Ferndale, Humboldt County, Cal.

A Fair Association has been formed at Pleasanton, Cal., and arrangements are being made for holding the first county exposition there, commencing October 23d.

ARIZONA NOTES.

Glendale has already commenced shipping turkeys. Conditions for raising turkeys are exceptionally good in this locality, and many large flocks are being made ready for market. The warm, dry atmosphere is a particularly favorable condition in the growing of turkeys, and the Glendale stock brings good prices in the outside market.

Frank Reed Sanders of Mesa is in a Sacramento, Cal., hospital, with a broken arm and severe bruises as a result of a railroad accident in Northern California. The Sanders Dutch-Belted cattle won most of the first prizes and all of the championships at both the Oregon and the California State Fairs. Mr. Sanders is improving nicely, and it is expected that he will soon be able to return home.

Carload shipments of alfalfa seed are now being made from the Salt River and Buckeye Valleys. The high quality of the seed raised in these two valleys enables the growers to obtain a fancy price on the Eastern market, where the hay also finds ready sale at good prices on account of its excellent quality and coloring.

Heavy importations of cattle from Mexico are reported at points of entry in Arizona. Over 6000 head recently passed through Douglas in seven days.

Arrangements have been completed for the shipment of cattle to feeding points at through rates. Commencing September 10th stock may be shipped to feeding points, unloaded and fattened, and then reshipped at through rate.

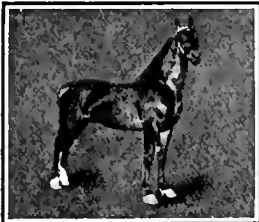
The Arizona Fair at Phoenix, October 28th to November 2d, promises to be a great event. Besides large exhibits of live stock and poultry, there will be fast harness races, running races, automobile races and numerous high-class sports. Sixth cavalry band will provide music and be in camp during the week of the fair.

The new alfalfa mill at Phoenix is nearing completion and will probably open in October. The plant is fireproof, and is equipped to handle a large tonnage.

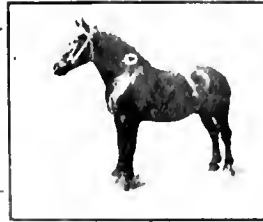
A campaign is under way to make provision for additional experimental station work in Salt River Valley. The instigators of the movement suggest the establishment of four farms of forty acres each, operating under conditions generally obtaining throughout the valley.

RESULTS OF RECLAMATION.

Farmers living in Salt River Valley, Ariz., have good reason to endorse the reclamation service. Their experience has demonstrated the value of reclamation in no uncertain terms. They have all the water they want for this season's crops stored in the big Roosevelt reservoir and enough for the coming two years. They have sold for \$400,000 per year 10,000 hydro-electric horsepower, a part of 27,000 horsepower developed by the water on the way from the dam to the farm lands, and the total income from this source will eventually be over \$1,000,000 a year. This will furnish cheap power for operating mines and will allow the development of many low-grade properties that otherwise could not be developed. The mines will create new markets for the products of the same farmers who are supplying the power. It looks like one continual round of prosperity for the farmers.



THE HORSE



THE WESTERN DEMAND FOR MULES AND JACKS

(Written for The Live Stock and Dairy Journal by Egbert Norman Clark.)

In the Western States, especially California, the demand for first-class mules is increasing rapidly. The breeders and farmers are beginning to recognize the true worth of this much ridiculed animal.

In many of the large trucking centers the mule is gradually displacing the horse as a draft animal. This is especially true in the brewing industry.

The writer knows of one sugar beet company in California that works 6000 head per year, and of others that use from two to three thousand. There are several ranches that have from three to five hundred, and there is one stock company near San Francisco that rents out over 1000 mules.

The mule is in great demand at all times on all kinds of construction work, and as there is a great amount of such work now being done in the West the supply is not near equal to the demand. Contractors doing railroad construction, grading, ditch building, etc., often have trouble in getting enough mules to meet their need.

The Government is constantly buy-

ing mules for service in the War Department and to ship to its island possessions. There are several foreign countries that look to the United States for their supply of mules. When all of these sources of demand are considered the possibilities for profit in raising mules look favorable to the breeder.

Mules are longer lived than horses. It costs less to feed them. One breeder assured the writer that he could keep a team of mules on what it cost him to keep one horse. Being a much harder animal than the horse, mules require less care and can withstand the extremes of most any climate. The prices asked for mules do not vary to as great an extent as the prices for horses. Speed, gait, carriage and other factors that are seriously considered in purchasing a horse are given very little attention in the mule market. The mission of the mule is to do hard work, and very little can be added to their price on account of looks or style. But there are, nevertheless, many points of merit that should be considered in buying or breeding mules, and as a rule such points can be traced to the influence of their male progenitor. The old notion that the mule is vicious, stubborn and difficult to train is erroneous. It is naturally a timid creature

and often affectionate, but has an unusual habit of resenting an injury. They are no more difficult to handle than horses if given kind treatment and proper training from colthood.

In the Pacific Coast States the growing popularity of the mule is manifested in the heavy and increasing demand for jacks as reported by breeders and dealers.

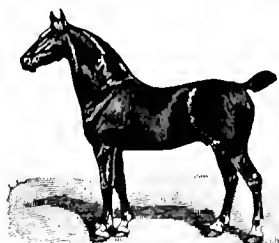
The quality of the jack is of the greatest importance, for the progeny always bears the marks of his influence. Most of the Western breeders demand large jacks from fifteen to sixteen hands high, but there are some who prefer a smaller animal providing it is not deficient in other respects.

An ideal jack should have a good round barrel, depth of chest, long body and heavy, flat-boned limbs. The face should be long and thin. A firm under jaw and ears that stand upright. As to disposition he should be gentle but lively.

The jack should be fed and cared for with the view of promoting and maintaining the greatest physical force and vigor, and not allowed to serve too great a number of mares during a season. Jacks often become useless for crossing purposes from being allowed to mate with their own kind. Food that will promote strength

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



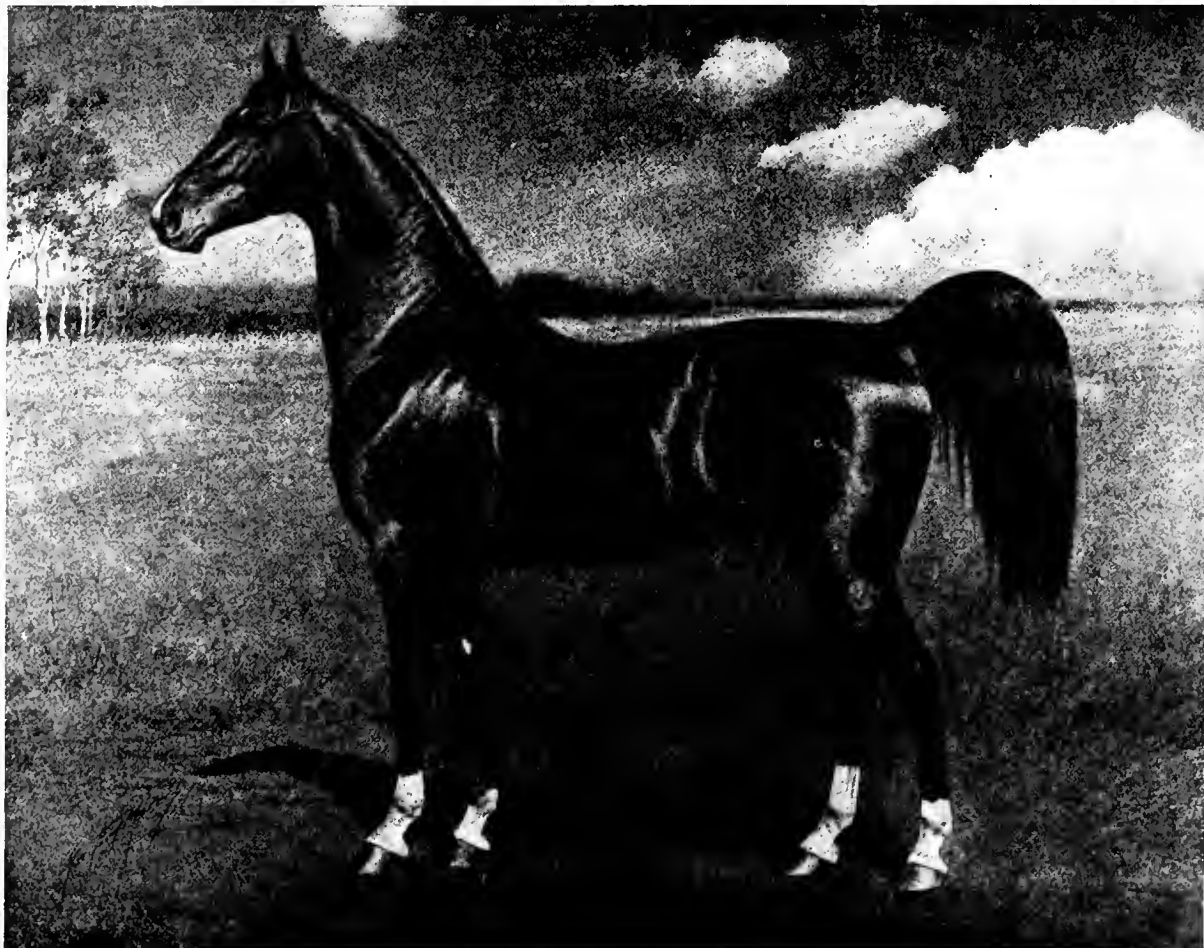
Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for

Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunchees from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. If send for descriptive circulars, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.



Lord Denmark (2801 A. S. H. B. A.), by Highland Denmark, Out of Lady Glascoe. A winner of Sixteen Blues out of Twenty Times Shown as a 3-Year-Old in Kentucky. Owned by Mrs. E. P. Riggle, Piru, Cal.

JACKS AND JENNETS



If you are wanting a good Jack or Jennet, fully guaranteed, call on or write me.
I have the largest Jack and Jennet farm west of the Rocky Mountains, and am raising only the large, heavy-boned kind, and am selling them at reasonable prices.

J. E. DICKINSON,

FRESNO, CALIFORNIA

JOHN TROUP, GOLETA, CAL.

IMPORTER OF CLYDESDALE, SHIRE AND PERCHERON HORSES AND REGISTERED CATTLE OF BEEF AND DAIRY BREEDS.

All Stock Sold at Reasonable Prices. Every Animal Guaranteed as Represented. Orders Executed on Commission. Reference, Commercial Bank, Santa Barbara, Cal.

Salvador Stock Farm

Napa, California



Headquarters For Shires

My winnings, given below, at the State Fair just closed:
First and second 4-year-old stallion.
First and second 3-year-old stallion.
First 4-year-old mare.
First 3-year-old mare.
First 1-year-old mare.
Grand champion stallion.

Grand champion mare. These winnings should convince anyone of the quality of my stock.
Write for prices, which you will find very reasonable.

**HENRY
WHEATLEY**

SHIRES

We offer for sale young mares and stallions from some of the best stock in England. Ages range from 1 to 4 years. These are all good individuals, and every one is absolutely sound. We also have saddle horses and driving stock for sale. Correspondence and inspection of stock invited.



BLACK HAWK RANCH, Burlingame, California
PHONE 131. A. W. WARD, Superintendent

and not produce feverishness should be fed. Plenty of natural exercise and the run of a grass lot will tend to keep a jack in good condition.

The recent and extensive importation of Spanish jacks to the United States has tended to raise the standard for mules and produce animals that reach maturity early, with good size and action. Several carloads of jacks have been shipped into California during the past few months, and many breeders are going in for mule breeding on a large scale, and from all indications the industry demands even greater interest on the part of Western breeders and farmers.

The climate and natural resources of California are very favorable to the raising of mules, and with the importation of more good jacks the local breeders will have the needed element to meet the demands of the market.

AN EXCEPTIONAL LOT OF JACKS.

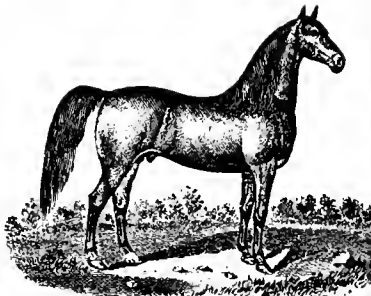
The jacks shown on the California State Fair grounds by H. B. Thornberry, were fully equal to all the claims Mr. Thornberry made for them. While they were not entered for prizes, and were therefore not shown in the show ring, there was a constant stream of visitors passing through the barn which Mr. Thornberry erected to house them during fair week, and the most favorable comment was heard on all sides from men who know good jacks.

Missouri Wonder, the undefeated champion of twenty-two State Fairs in the East, was bought by H. P. Slocum & Sons, Glenn, Cal., and will stand during the coming season at their ranch.

This lot of jacks is remarkable for their uniform marking, good bone and general appearance, and to insure breeding, Mr. Thornberry, while selecting them in Missouri, insisted in all instances upon seeing their colts. The influx of such numbers of this grade of jacks into California means much for the jack and mule breeding interests of the State, and while the effect will not be noted for three or four years, when the get of this lot begins to be of servicable age, yet the breeder who anticipates the future, as all real breeders must, will find among this lot of jacks a great foundation upon which to build the good, long-eared stock of the next few years.

Present indications are that this entire lot will be sold out within a very short time, as many prospective buyers looked the stock over during fair week and a number were practically bought on the spot.

Be careful about feeding horses inclined to heaves, too much hay, or hay that is dusty.



Jack Rogers 4576

Won First Prize at State Fair 1911 in saddle class, 2 years and under 3, and also won second in combination ring among aged horses. He fills the eye of lovers of good horses. I stand him at the low sum of \$20.

Also Col. Rogers (3287) at the same price.

Their colts will sell at sight to anyone wanting a fine saddle colt.

J. T. RAGSDALE

Breeder and Trainer of Five-Gaited Saddle Horses.

MERCED, CALIFORNIA

MINNEWAWA STOCK FARM

Four

Registered Percherons

Stallion and three mares. Not a single Colt from all shown. Price for the bunch, \$4,000.

M. E. Sherman,

Fresno, Cal.



J. L. MCCARTHY

LIVE STOCK AND REAL ESTATE AUCTIONEER

Fifteen years experience at Chicago, St. Louis and Kansas City Stock Yards. Country sales a specialty. Address: Key Route Hotel, Oakland, Cal.

Horses, Mules & Shetland Ponies

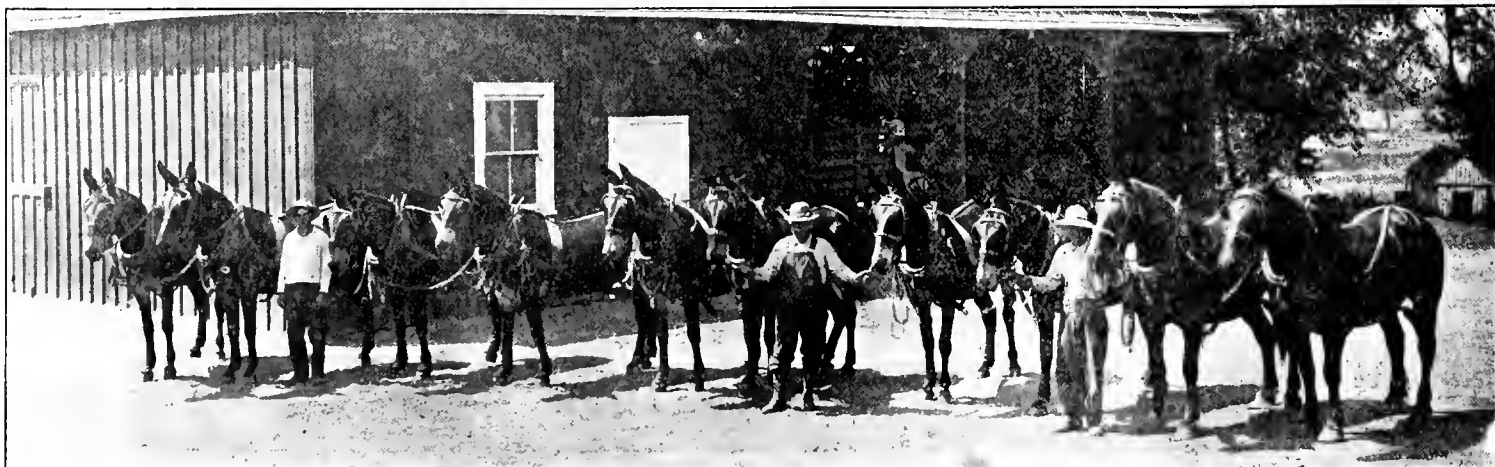
I both buy and sell mules and horses. Have on hand at all times mules for hire in carload lots. Also breed Shetland Ponies, and have several weanling colts and a few well broke ponies for sale.

J. L. MENDENHALL.

WILLIAMS, CAL.

All ewe lambs that are not desirable to raise as breeders should be given extra feed and sent back to the block early.

A good ration for rams during the breeding season is oats, bran and linseed meal, with such fodder as alfalfa.



The Mule Finds Favor as a Work Animal on the Ranch of H. E. Vogel, Fresno, Cal.
Mention the Live Stock and Dairy Journal When Writing to Advertisers.

Never shout or use rough words to your horse. You will get much more from him by kindness. You would do more yourself for one who treated you well than you would for one who used rough, bad words. Your horse feels the same way.

Nothing like the mule for hard knocks; he lives to a good old age, and is easily taken care of.

Do not let a horse stand two or three days without exercise. Take him out of the stable every day long enough to exercise him. Be sure to give him fresh air also. To keep him well and strong a horse needs to have fresh air let into his stable, just as you need fresh air let into your bedrooms to keep you well and strong.

Cold, exposed sleeping quarters that compel the sows to pile up in order to keep warm are usually responsible for the dead pigs at this time.

PHOTOGRAPHING LIVE STOCK

Every breeder of live stock should own a camera and take pictures of his stock during various stages of their development and when conditions are favorable.

Nearly all dealers in photographic supplies make a specialty of developing and printing, and at prices so reasonable that it is cheaper for the amateur to have them do such work.

Some excellent results can be obtained with small and inexpensive cameras, and by having enlargements made from the desirable prints one can save the expense and trouble that a large camera with complicated mechanism calls for.

It is difficult for the amateur to get good time exposure negatives from live stock. It is best to take snap shots in bright sunlight and avoid trying to pose the animals according to some preconceived scheme of composition. The more one tries to get an animal in some particular position the more difficult it is to do so, for the animal becomes restless and agitated, and failure to get good results is often due to the fussing about of the man with the camera.

A good way is to set and adjust the camera, pointing it towards the background preferred and then have some one lead the animal slowly around it at the proper distance, and when in line with the camera, make the snap shot, or have the assistant stop the animal at the proper point in the circle. By making three or four exposures this way one is almost sure to get at least one satisfactory negative.

In photographing cows there is a short period of time during which the animal waits for the cud to rise, and is perfectly still. By snapping the shutter at this time one can get a time exposure. Good pictures of horses are often obtained by suddenly attracting their attention to some unusual object. For a moment they will assume an alert and rigid attitude. The head will be held high; the ears erect; the nostrils will be dilated and the eyes wide open. The camera manipulator must be quick, for the pose lasts but a second.

By carrying a small camera on tours of inspection the breeder will find many opportunities to get excellent photographs of individuals or groups.

It is a good plan to enclose small photographs of stock in letters to prospective buyers, for they will keep them where they would throw away a piece of printed matter, even though it contained a half-tone reproduction of the same picture. From \$5 to \$10 will buy cameras from which good results can be obtained. Half-tone reproductions can be made from enlargements of small and desirable prints.

LAFAYETTE STOCK FARM

J. CROUCH & SONS Props.

LAFAYETTE, INDIANA

Mr. G. R. Crouch, junior member of our firm, has returned from Europe with an importation of Stallions and Mares, among which are some of the outstanding winners of the great French shows.



AT THE PARIS SHOW OUR HORSES WON AS FOLLOWS:

In the Aged Percheron Stallion Class.....	1st, 2d, 3d and 4th
In the Three-Year-Old Percheron Stallion Class.....	1st
In the Two-Year-Old Percheron Stallion Class.....	2d and 3d
In the Aged Percheron Mare Class.....	1st and 2d
In the Three-Year-Old Percheron Mare Class.....	1st

AT THE ALENCON SHOW WE WON AS FOLLOWS:

In the Aged Percheron Stallion Class.....	1st and 2d
In the Three-Year-Old Percheron Stallion Class.....	1st and 2d
In the Two-Year-Old Percheron Stallion Class.....	1st and 3d
In the Aged Percheron Mare Class.....	1st and 2d
In the Three-Year-Old Percheron Mare Class.....	1st and 3d
In the Two-Year-Old Percheron Mare Class.....	1st and 3d

Our new importation includes all of these great prize winners and a great lot of other high-class Percheron and Belgian Stallions and Mares. A representative number of these fine individuals are now in California at the permanent stables of J. Crouch & Sons at State Fair grounds, Sacramento.

J. F. CAMPBELL, Manager.

Sacramento, Cal.

Phone, Capital 31.

Jacks and Jennets

20
JACKS



22
JENNETS

I am back at my old location at the Stockton Fair Grounds with the best lot of Jacks and Jennets ever seen in one lot on the Pacific Coast.

The Jacks are all black with white points, range in age from 3 to 7 years, and all but two are over 15½ hands, standard measure, several reaching 16 hands and two 16 hands and 1 inch.

PRICES RANGE FROM \$1250 UP, AND THEY WILL BE SOLD WELL WORTH THE MONEY AND UNDER MY USUAL GUARANTEE, WHICH IS WITHOUT DOUBT THE BEST GUARANTEE PRINTED OR GIVEN TODAY WITH ANY CLASS OF BREEDING STOCK IN THE UNITED STATES, AND MY GUARANTEES ARE ALL MADE GOOD TO THE LETTER.

I also have on hand a carload of the best Registered and Pedigreed Jennets possible to procure. They are of the large, heavy boned type which raise the premium Jacks, such as can be seen in the lot advertised above. Money will not buy better ones.

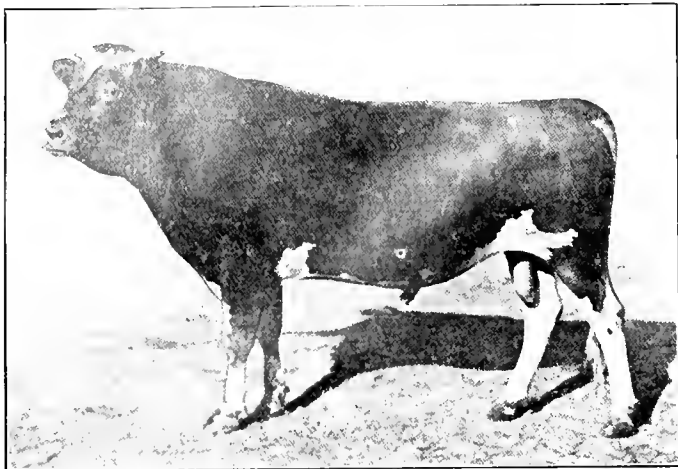
My one aim is to have none but the very best, either in Jacks or Jennets, as the best is the only kind I believe in having, or upon which I will put my name to a guarantee, and they are the only kind which will advance the breeding of the best purebreds in California.

Many of us are striving in the purebred stock field to place California at the top of the list of all states, and the prospects look most encouraging. With a little more co-operation among breeders the desire will be fully realized. The stock may cost a trifle more at the beginning, but the profits of the yield will be much greater in proportion.

H. B. Thornberry, Stockton, California

P. O. BOX 679

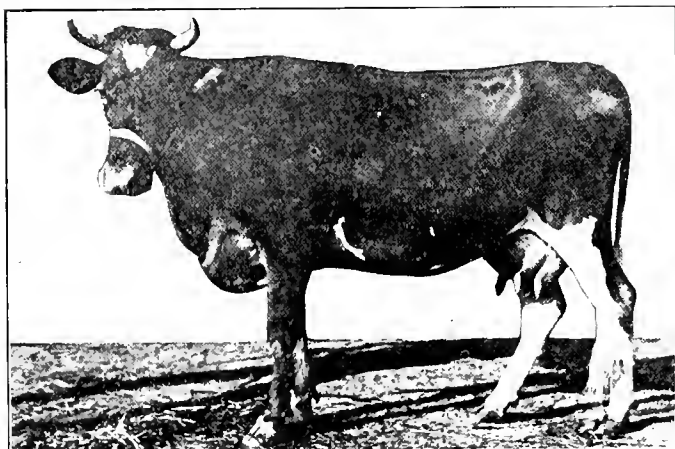
PERMANENT STABLES AT STOCKTON FAIR GROUNDS.



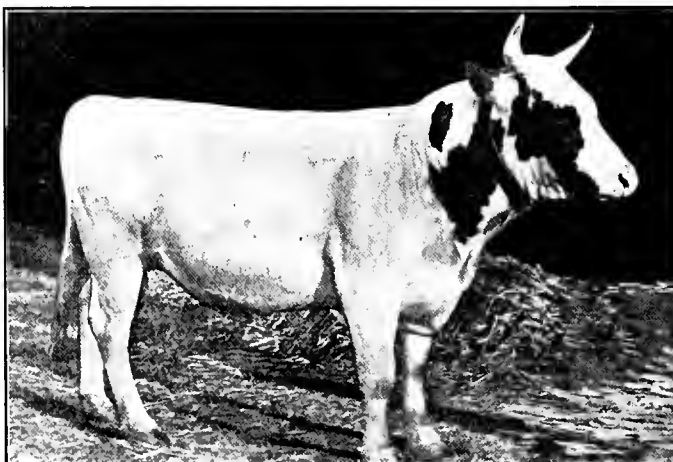
Kitchener's Corona Boy, Grand Champion Guernsey Bull. Exhibited by Chas. G. Lathrop, Stanford University.



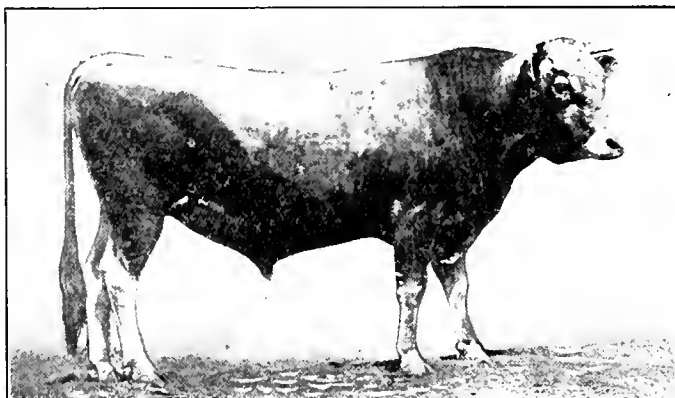
Hensje of Valley Farm, Grand Champion Dutch-Belted Cow. Exhibited by Frank Reed Sanders, Mesa, Ariz.



Conqueror's Primrose, Grand Champion Guernsey Cow. Exhibited by Chas. G. Lathrop, Stanford University.



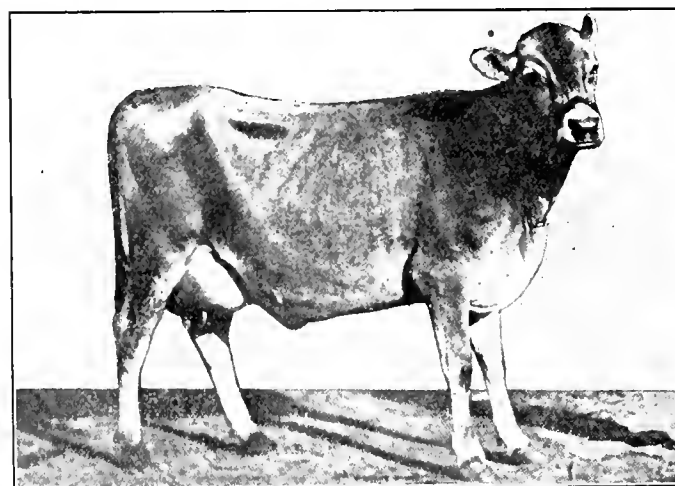
Willowmoor R. 4th, Grand Champion Ayrshire Bull. Exhibited by Wallace Macdonald, Mesa, Ariz.



Altama Interest, Grand Champion Jersey Bull. Exhibited by Guy H. Miller, Modesto, Cal.



Snowdrop of Mesa, Grand Champion Ayrshire Cow. Exhibited by Wallace Macdonald, Mesa, Ariz.



Valet's Golden Biddy of Lockeford, Grand Champion Jersey Cow. Exhibited by N. H. Locke Co., Lockeford, Cal.

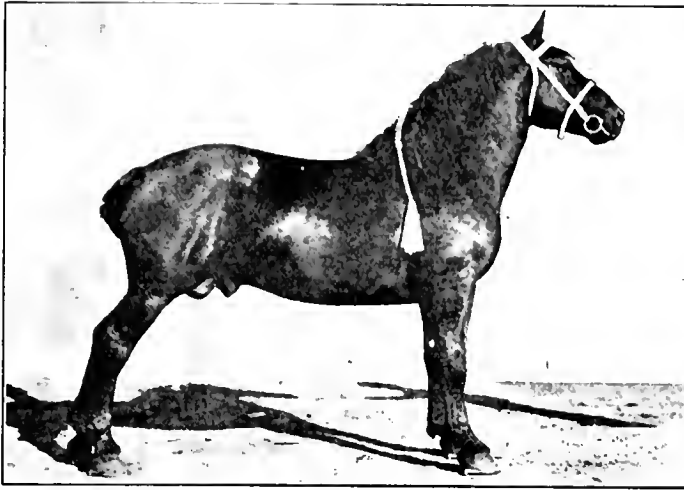


Riverside Sadie De Kol Burke, Grand Champion Holstein Cow. Exhibited by A. W. Morris & Sons, Woodland.

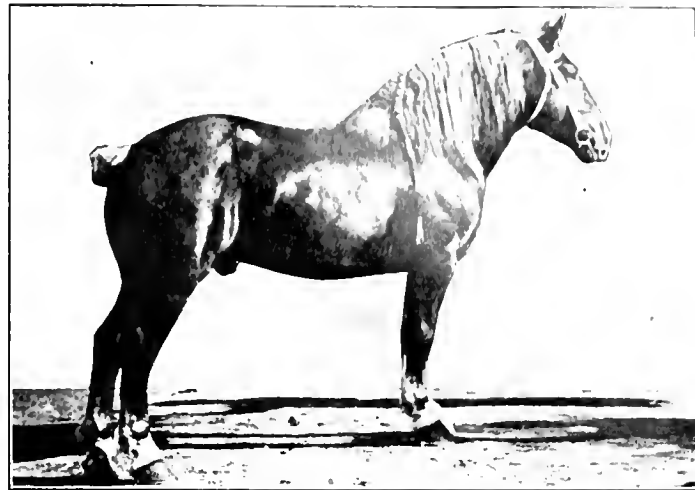
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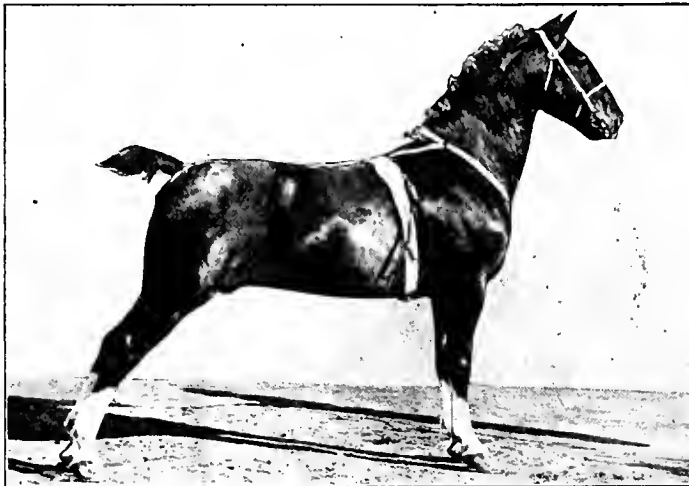
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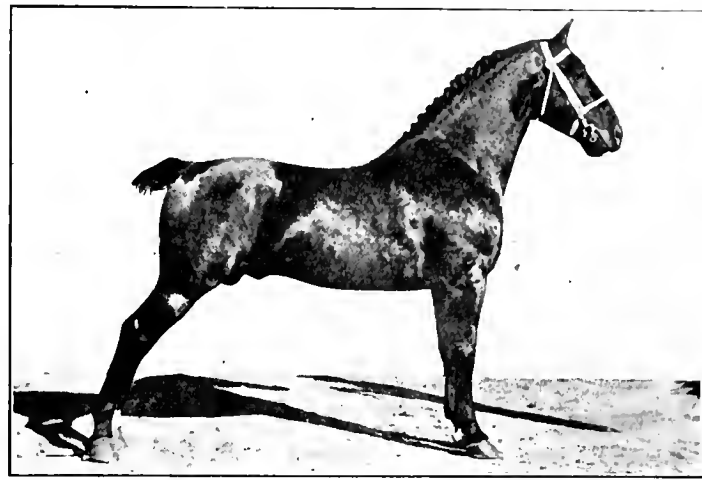
Jean Bart (86379), Grand Champion Percheron Stallion. Exhibited by J. Crouch & Son, Sacramento, Cal.



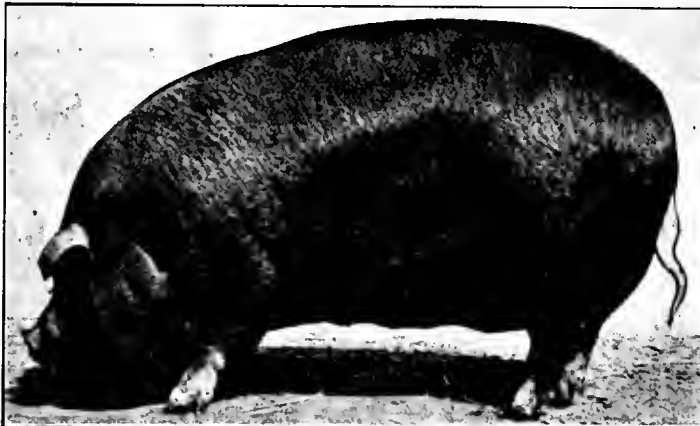
Forton, Grand Champion Belgian Stallion. Exhibited by J. Crouch & Son, Sacramento, Cal.



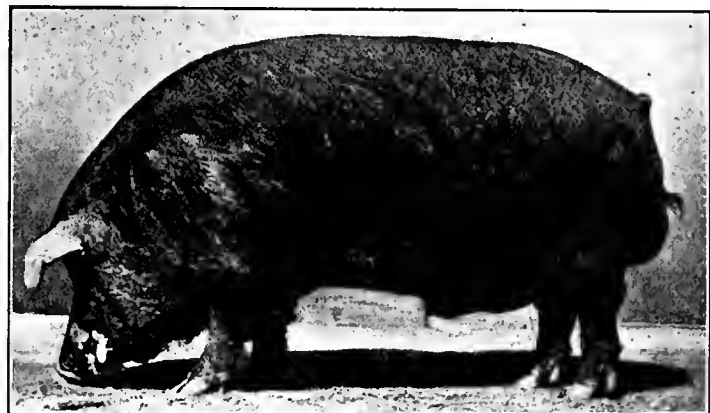
Yorkshire Elect, Grand Champion Hackney Stallion. Exhibited by J. Crouch & Son, Sacramento, Cal.



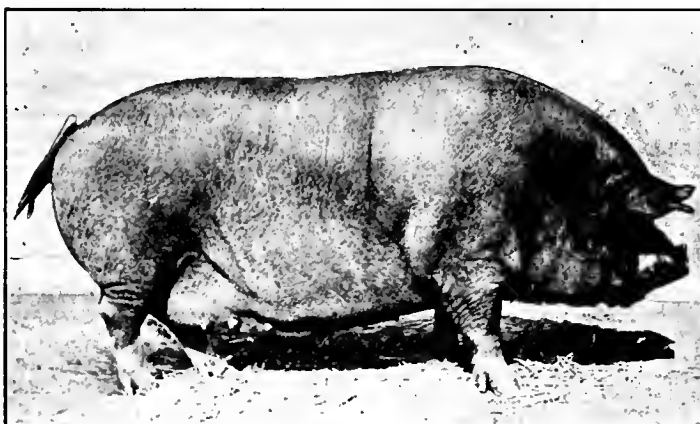
Ferro, Grand Champion German Coach Stallion. Exhibited by J. Crouch & Son, Sacramento, Cal.



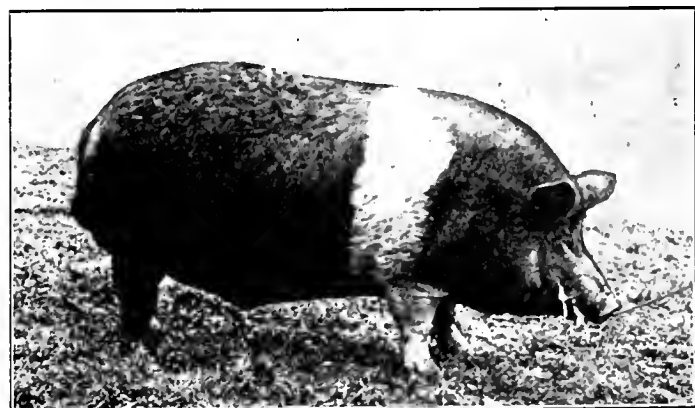
Miss Victoress, Grand Champion Poland China Sow. Exhibited by M. Bassett, Hanford, Cal.



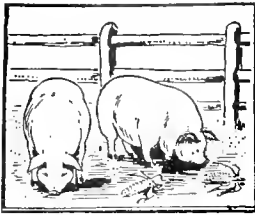
Foxy Model, Grand Champion Duroc Jersey Boar. Exhibited by H. P. Slocum & Sons, Glenn, Cal.



Jenette Lee, Grand Champion Berkshire Sow. Exhibited by G. A. Murphy, Perkins, Cal.



Bollman's Wonder, Grand Champion Hampshire Boar. Exhibited by Fruitts & Bollman, Joseph, Ore.



THE SWINE HERD



Poland Chinas

I have sold everything that was old enough for service. Read about the big sale of Poland Chinas from Kings County in this issue. But I have fifty fine pigs farrowed in June and July.

W. Bernstein

HANFORD, CAL.

DUROC JERSEY BOARS

Sired by Our Grand Champion Boar at California State Fair.

H. P. SLOCUM & SONS,

R. 1, GLENN, CAL.

MULEFOOT HOGS

Prolific and hardy. Try one of our Boar Pigs and you will be satisfied. Have some pure blooded pigs. Have also a few half-bloods at reasonable prices. Orders and inquiries receive prompt attention.

BRYANT BROS.

Lemoore, California

HILLMONT FARM

High-Class Registered

BERKSHIRE HOGS

Write for Information or Come and See.

CHAS. GOODMAN, Williams, Cal.

O. I. C.

Ohio Improved Chester White.

"The Big White Hog"

Fast Growing, Early Maturing
Big, Healthy and Prolific

Our offering is large and excellent, consisting of young stock of both sexes, from weanlings to service size.

Tested sows and service males of all ages.

Stock furnished not akin.

Registered and crated free.

We are located near Mills, 12 miles east of Sacramento, on the Folsom Road.

Studarus and Cunningham

Mills, California

Swine at the State Fair

There was a notable increase in the number of entries in the swine classes at the State Fair, and quite a number of breeders made their appearance there for the first time. The total number of swine entered was 315, of which 111 were Berkshires, 101 Poland Chinas, 39 Duroc Jerseys, 18 O. I. C., 20 Hampshires, 26 Tamworths.

The swine were judged by N. H. Gentry of Sedalia, Mo., an authority of national repute. Mr. Gentry leaned strongly toward highly fitted stuff, and many a good individual in good breeding condition but not in high show condition failed to get inside the money. As a rule California breeders have not been in the habit of fitting their swine for show purposes quite as well as is done for the Eastern fairs, where Mr. Gentry has been accustomed to judging.

that in Artful Masterpiece they have one of the greatest hogs living today. He was made grand champion of the show. Grand Master Lee (113335), owned by University of Nevada, was a close second. This hog was grand champion last year. He is sired by a son of the great Masterpiece, and is 5 years old. A. B. Humphrey's Mayhew Masterpiece, awarded third place, was a substitute for Double Premier (88215), who died three weeks before the Fair, and who would have shown in much better condition than was his substitute. Holt's Longfellow, only 2 years old, Kennett, a winner of many prizes at previous Fairs, and Artful Starmaster, a 3-year-old boar, are all worthy of special mention, and their owners have the satisfaction of knowing that they were beaten by some good ones.



N. H. Gentry (Center Background) Picking a Winner at California State Fair.

THE BERKSHIRES.

The exhibitors of Berkshires included Oak Grove Dairy Farm, Woodland, Cal.; Calla Grove Farm, Ripon, Cal.; Four Oaks Stock Farm, Woodland, Cal.; A. B. Humphrey, Mayhews, Cal.; Greenfields Farm, Klamath Falls, Ore.; University of Nevada, Reno, Nev.; G. A. Murphy, Perkins, Cal.; University Farm, Davis, Cal.; H. L. Murphy, Perkins, Cal.; M. H. Whitacre, Dixon, Cal.; California Polytechnic School, San Luis Obispo, Cal.

A. B. Humphrey of Mayhews carried off the greatest share of Berkshire ribbons because of the splendid condition in which his entries were shown, while Four Oaks Stock Farm and G. A. Murphy came in for a good share of honors. Except for an occasional award, these three carried off the bulk of the money.

A very strong class presented itself in the aged boar class. Artful Masterpiece (110970), 5 years old, shown at 900 pounds, appeared to be the heaviest, with very even body. This boar is backed by a pedigree that would be hard to beat, including as it does fifteen great individuals in the first three generations. His sire was Masterpiece, generally acknowledged the best Berkshire boar that ever lived. The Four Oaks people believe

In the yearling boar class Superior Star (145224) and Dora's Duke (143687) made keen competition, the former taking the blue ribbon and later the reserve championship because he overfitted the latter, who appeared to be the more vigorous of the two individuals. Superior Star is a Berryton Duke boar, and is a splendid representative of true Berkshire type. Baron Geronimo (153625), who took third money, did not measure quite up to the standard of the other two.

Boars under 6 months did not present as good a class as the first two. Brinton's Longfellow (166579) appeared to be the best all round boar. Kennett Highwood 2d (166159) was not quite so good on feet, while Legal Duke (163802) might be considered a trifle short.

For boars under 6 months all three ribbons went to A. B. Humphrey, who presented three animals so near alike that it would have been hard to place anything in between them. They were a well fitted, well developed, uniform trio, whose names do not appear because they have not yet been registered.

In the aged sow class G. A. Murphy carried off the honors with Jenette Lee (109443), 5 years old who showed against a lot of younger cows. Jennet-

300

**Purebred
Berkshires
Duroc - Jerseys
Tamworths
at**

Swineland

We are offering high-class Boars, ready for service and Spring Pigs of both sexes, for immediate shipment.

All stock sold on a money-back guarantee.

Swineland

Box 161 Yuba City, Cal.

RED DUROC HOGS

Best Bred Stock Now in California

YOUNG STOCK AND SERVICE BOARS AND SOWS FOR SALE

All registered pure-breds, and from such sires as Wonder and Klondike. New Importations from Missouri and Indiana. We are located in the Imperial Valley, and are here to supply California, Oregon and Arizona breeders. Write for prices and pedigrees to

MOORE BROS.,

Box 202, El Centro, Imperial Co., Cal.



Recorded Mule Footed Hogs are very prolific as well as less susceptible to Swine Diseases. Their great vitality, large litters and quick growth make them the coming hog. JOHN H. DUNLAP, Box 499, Williamsport, Ohio.

Roselawn Stock Farm

WOODLAND, CAL.

**BREEDER OF SHORTHORN CATTLE,
POLAND CHINA HOGS,
SHROPSHIRE SHEEP**

T. B. GIBSON

Proprietor

te Lee has held together wonderfully well, and it was on this point that she won the blue ribbon and later the championship. She has great depth of rib, and is very smooth on shoulders and good on feet. Humphrey took second and third on Master Rival Princess (152100) and Columbia's Model 2d (123179), both good sows, but not considered quite so good in shoulders as Jenette Lee.

In yearling sows Murphy again claimed blue ribbon, this time on Robin's Ruby (152922), an active sow with evenness and length, and considered by the judge to be a little better on feet than Grapo Wild Invincibella (166370) and Mayhews Monarch Beauty (166382), two Humphrey sows placed second and third.

Four Oaks Farm made a cleaning in the next class, sows over 6 months and under 1 year, on Belle Wilts 34th (166577), Belle Wilts 35th (166578) and Four Oaks Duchess 93d (166735), a uniform trio with the right kind of bodies and nice heads.

Humphrey scored twice again in the class for sows under 6 months by taking first and second places with a pair of the quick developing kind, while G. A. Murphy was a good third.

The complete list of Berkshire awards follow:

BERKSHIRES.

Boars, 2 years and over—First, Four Oaks on Artful Masterpiece; second, University of Nevada on Grand Master Lee; third, Humphrey on Mayhews' Masterpiece.

Boars, 1 year and under 2—First, Humphrey on Superior Star; second, G. A. Murphy on Dora's Duke; third, C. P. S. on Baron Geronimo.

Boars, over 6 months and under 1 year—Four Oaks on Brinton's Longfellow; second, Calla Grove on Kenneth Highwood; third, G. A. Murphy on Legal Duke.

Boars, under 6 months—First, second and third to A. B. Humphrey.

Sows, 2 years old and over—First, G. A. Murphy on Jeanette Lee; second, Humphrey on Master Rival Princess; third, Humphrey on Columbia's Model.

Sows, 1 year and under 2—First, G. A. Murphy on Robin's Ruby; second, Humphrey on Grape Wild Invincibella; third, Humphrey on Mayhews' Monarch Beauty.

Sows, over 6 months and under 1 year—First, second and third, Four Oaks on Belle Wilts 34th, Belle Wilts 35th and Four Oaks Duchess.

Sows, under 6 months—First and second, Humphrey; third, G. A. Murphy on Duke's Dolly.

Four pigs, under 1 year, produce of one sow, bred and owned by exhibitor—H. L. Murphy on produce of Kennett's Duchess; second, Humphrey on produce of Silver Tips 88th; third, Greenfields on produce of Woodlawn Duchess 13th.

Four pigs, under 1 year, get of one sire, bred and owned by exhibitor—First, Four Oaks on get of Ravenwood Longfellow 10th; second, Humphrey on get of ; third, H. L. Murphy on get of Kennett Lee 3d.

Boar and three sows, over 1 year—First, Humphrey; second, G. A. Murphy; third, University of Nevada.

Boar and three sows, under 1 year—First, Four Oaks; second, Humphrey; third, H. L. Murphy.

Gold medal boar—Artful Masterpiece; silver medal, Superior Star.

Gold medal sow—Jeanette Lee; silver medal, Robin's Ruby.

DUROC JERSEYS.

The exhibitors in the Duroc Jerseys included H. P. Slocum & Son of Glenn, Cal.; J. K. Fraser of Denair, Cal.; Swineland Farm, Yuba City, Cal.; John P. Daggs, Modesto, Cal.; J. E. Thorp, Stockton, Cal.; Linquist Brothers, Turlock, Cal.; University Farm, Davis, Cal.

This was, indeed, a splendid showing for the Durocs in view of the fact that at the last Fair there was only one herd of this breed shown. It indicates that the breed is rapidly gaining a foothold in this State, and by another year we look to see the entries as large as in Berkshires and Poland Chinas.

The Slocums won first for aged boar and championship, with Foxy Model (122495), a typey, long individual of outstanding quality, who defeated Fraser's Victor 1st (96425), a good one, too, but not quite so well fitted for show. The best yearling boar, however, was found in Fraser's

pens, being King Golden (114919), who was made reserve champion. University Farm had the good sows to the judge's way of thinking, and won both the gold and the silver medals.

Following is the complete list of Duroc Jersey awards:

DUROC JERSEYS.

Boar, 2 years and over—First, Slocum on Foxy Model; second, Fraser on Victor 1; third, Johnson on Junior 1.

Boar, 1 year and under 2—First and second, Fraser on King Golden and R. D.'s Beauty; third, Daggs on Daggs' Fancy California II.

Boar, under 6 months—First, University Farm on University Farm's Advance; second, Fraser on Gladys; third, Linquist on Juno A.

Sow, 2 years and over—First and second, Fraser on Lady Isabel and Gladys 11th.

Sow, 1 year and under 2—First and second, University Farm on Long Advance and Stewart's Sensation; third, Thorp on Miss Lady Chief.

Sows, over 6 months and under 1 year—First, Thorpe on Fancy Nellie.

Sows, under 6 months—First, second and third to University Farm on Queen of U. F., Miss Advance of U. F. and Princess of U. F.

Four pigs, under 1 year, produce of one sow, bred and owned by exhibitor—Daggs on produce of Nameless; second, Swineland on produce of Yuba's Prize; third, Johnson on produce of Wayne's Beauty.

Four pigs, under 1 year, get of one sire, bred and owned by exhibitor—First, University Farm on get of Cherry Chief; second, Swineland on get of Yuba's Boy; third, Johnson on get of Junior 1.

Boar and three sows, over 1 year—First, Fraser; second, Johnson; third, University Farm.

Boar and three sows, under 1 year—First, University Farm; second, Johnson; third, Fraser.

Gold medal boar—Foxy Model; silver medal, King Golden.

Gold medal sow—Long Advance; silver medal, Queen of University Farm.

POLAND CHINAS.

The exhibitors in the Poland China section were M. Bassett of Hanford, Cal.; A. M. Henry of Farmington, Cal.; Greenfields Farm, Klamath Falls, Ore.; University Farm, Davis, Cal.; University of Nevada, Reno, Nevada; W. H. Browning, Woodland, Cal.; G. V. Beckman, Lodi, Cal.; P. H. Murphy, Perkins, Cal.

Competition was not so keen in the Poland China classes as in the Berkshires. The outstanding Bassett herd, which has cleaned up the lion's share of the ribbons at California Fairs in recent years, did not encounter competition keen enough to keep it from annexing its usual quota of ribbons.

In the aged boar class the blue ribbon went to A. M. Henry, an old breeder but a new exhibitor, on H.'s Big Bone (149311), a large, typey individual, close to the ground, with good body and constitutional vigor, but crowded hard by Bassett's boar, Victor (74591). In the yearling class and again in the third and fourth classes Bassett was awarded the two first places. Wonderful Victor took championship honors. At 1 year of age he weighs over 400 pounds, and Mr. Bassett declares he has never raised a prettier animal. He has much substance, is uniformly smooth and possesses fine legs and feet. The reserve champion was found in the class under 6 months—Victor Meddler, a promising youngster that caught the fancy of the judge, and who will, no doubt, be heard from at future shows.

In sows Bassett took most of the ribbons, although in the aged class he was beaten by University Farm, which had a couple of good ones in Happy Girl (140042) and Hillcroft Susan (144532), the former being made reserve champion. Miss Victoress, champion sow, is a wonderfully smooth individual, combining size with refinement, and is perfectly marked, with no defects.

The complete list of Poland China awards follow:

POLAND CHINAS.

Boar, 2 years and over—First, Henry on H.'s Big Bone; second, Bassett on Victor; third, University Farm on Matchless Expansion.

Boars, 1 year and under two—First and second, Bassett on Gold Coin and Master



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A few tried and proven brood sows and bred gilts priced to sell. Satisfaction guaranteed. Write us your needs.

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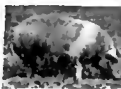
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We are able to quote you the best Berkshires at the cheapest prices.

Further information cheerfully given.

Oak Grove Dairy Farm, Woodland, Cal.

Banker; third, Beckman on Golden Meddler.

Boars, over 6 months and under 1 year—First, Bassett on Wonderful Victor; second, University Farm on Expansion; third, Bassett on California Victor.

Boars, under 6 months—First and second, Bassett on Victor Meddler and Victor Corrector; third, Beckman.

Sows, 2 years and over—First and second, University Farm on Happy Girl and Hillcroft Susan III; third, Bassett on Model Corrector.

Sows, 1 year old and under 2—First, second and third, Bassett on Miss Victress, Silver Lady and Miss F. Corrector.

Sows, over 6 months and under 1 year—First, second and third to Bassett on Victress, Miss H. Corrector and Hickory Girl.

Sows, under 6 months—First and second, Bassett on Correct Spell and Hanford Spell; third, University Farm on Fair Mistress of U. F.

Four pigs, under 1 year, produce of one sow, owned and bred by exhibitor—First, University Farm on produce of Hillcroft Pride; second, Bassett; third, Greenfields Farm.

Four pigs, under 1 year, get of one sire, owned and bred by exhibitor—First, Bassett; second, University Farm on get of Matchless Expansion; third, Greenfields Farm.

Boar and three sows, under 1 year—First, Bassett; second, Henry.

Boar and three sows, under 1 year—First, Bassett; second, University of Nevada.

Gold medal boar—Wonderful Victor; silver medal, Victor Meddler.

Gold medal sow—Miss Victress; silver medal, Happy Girl.

HAMPSHIRE.

The exhibitors of Hampshires were Fruitts & Bollman of Joseph, Ore., and F. R. Sanders of Mesa, Ariz. They were a right good lot of specimens of the belted breed, the Fruitts & Bollman entries being shown in high condition and taking most of the honors. Bollman's Wonder (8899), awarded gold medal, is an outstanding individual, and was a prize winner in a number of Eastern fairs before being brought to this coast.

The awards were as follows:

HAMPSHIRE.

Boars, 2 years and over—Second, Sanders on El Ganador.

Boars, 1 year and under 2—First and second, Fruitts & Bollman on Bollman's Wonder and White Cloud; third, Sanders on El Salvador.

Boars, over 6 months and under 1 year—First, second and third to Fruitts & Bollman.

Boars, under 6 months—First, second and third to Fruitts & Bollman.

Sows, 2 years and over—First, Fruitts & Bollman on Lily of the Valley.

Sows, 1 year old and under 2—First, second and third to Fruitts & Bollman on Silver Lake Pride, R. H. Rose and Chief Josephine.

Sows, over 6 months and under 1 year—First, second and third to Fruitts & Bollman.

Sows, under 6 months—First, second and third to Fruitts & Bollman.

Four pigs, produce of one sow—First and second, Fruitts & Bollman; third, Sanders.

Four pigs, get of one sire—First and second, Fruitts & Bollman on get of Chief Joseph and Bollman Wonder; third, Sanders.

Boars and three sows under 1 year—First, Fruitts & Bollman.

Boar and three sows, under 1 year—First, Fruitts & Bollman; second, Sanders.

Gold medal boar—Bollman's Wonder; silver medal, White Chief.

Gold medal sow—Silver Lake Pride; silver medal sow, Lily of the Valley.

WHITE CHESTER.

Ed Schoel of Albany, Ore., was the only breeder showing White Chester hogs. They were in poor condition, no effort having been made, apparently, to put them in show condition. Very few first prizes were awarded, the judge considering that the entries in some of the classes were not good enough to take first money.

The awards follow:

WHITE CHESTER.

Boar, 2 years and over—Second, Schoel on Dick.

Boar, 1 year and under 2—Second, Schoel on Ed's Grand Chief.

Boars, over 6 months and under 1 year—First, Schoel on Advancer.

Boars, under 6 months—Second, Schoel on Oregon Pride.

Sows, 2 years and over—Third, Schoel on Beauty.

Sows, 1 year and under 2—First and third, Schoel on Bright Eyes and Lily White.

Sows, over 6 months and under 1 year—Second and third, Schoel on Starlight and Aly's Beauty.

Sows, under 6 months—Second and third, Schoel on Beauty's Pride and White Queen.

Four pigs, under 1 year, produce of one sow—Second, Schoel.

Four pigs, under 1 year, get of one sire—Second, Schoel.

Boars and three sows, over 1 year—Second, Schoel.

Boar and three sows, under 1 year—First and second, Schoel.

TAMWORTHS.

Tamworths were shown by Swine-land Farm, Yuba City, Cal., and Kennedy Brothers, Amsterdam, Cal., and the two herds made the strongest display of this bacon hog yet made at a California Fair. The Swine-land entries were shown well fitted and figured most prominently in the placing of awards. Nimrod III (7880) and Endora (8479), winners of gold medals, were pronounced very good types of the breed and would have done credit to their exhibitor in any company.

The full list of awards follow:

TAMWORTHS.

Boars, 1 year and under 2—First, Swine-land on Nimrod III; second, Kennedy Brothers on Steamboat.

Boars, over 6 months and under 1 year—First, Kennedy on Elmdale David.

Boars, under 6 months—First, Swine-land on Swine-land King XII; second, Kennedy on Merced Bruin.

Sows, 2 years and over—Second, Kennedy on Middletown Belle.

Sows, 1 year and under 2—First, Swine-land on Endora; second and third, Kennedy Brothers on Merced Queen and May Hogan.

Sows, under 6 months—First, Swine-land on Swine-land Queen; second, Kennedy Brothers on Merced Adeline.

Gold medal boar—Nimrod III; silver medal, Swine-land King XII.

Gold medal sow—Endora; silver medal, Swine-land Queen.

THE HENRY POLAND CHINAS.

Although a breeder of Poland China swine for many years, and located close to Sacramento, A. M. Henry of San Joaquin County made entries at the State Fair this year for the first time. Mr. Henry hadn't planned to show until the last minute, and did not have time to fit his hogs properly for show purposes, but they were in prime condition. His herd boar, H's Big Bone, is from the herd of Peter Mow of Iowa, a pioneer breeder of the large type Poland Chinas. His sire, Big Bone, is one of the noted sires of the breed. The get of H's Big Bone is scattered all over this coast, the Hawaiian Islands, Mexico and New Zealand. In his present condition this boar weighs 780 pounds.

Smoothness behind shoulder is a very desirable characteristic in breeding sows, as defects there are apt to breed very pronounced in boar pigs.

In some of the swine classes at the State Fair there was a much as a year difference in the ages of some of the entries. This is entirely too far apart, for even six months makes a lot of difference in the life of a hog.

W. H. Browning of Yolo County, who recently acquired the Dr. Clark herd of Poland Chinas, made a good start by entering a number of individuals at the State Fair, making a good showing for a beginner. The foundation for this herd was brought out from Ohio several years ago, and some of the very best blood lines are represented. Mr. Browning has an advertisement in this issue.

N. H. Gentry, who judged the swine at the State Fair, and who is one of the big Berkshire men of the country, says that the California Berkshires have as much quality, but are not quite so large as the Eastern Berkshires. He's from Missouri. Bring out some of your Eastern hogs in 1915, Mr. Gentry, and we'll SHOW YOU.

Grape Wild Farm HERD OF Berkshires

Herd headed by:

Double Premier (88215), a son of Premier Longfellow.

Mayhews Masterpiece (134906) and Grape Wild Master (134907), both sons of Masterpiece (77000).

Superior Star (145224), a son of Berryton Duke, Jr.

The sows in the herd are equally as well bred.)

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Young stock for sale, out of dams of choice breeding and sired by two great boars, Billie Rosebud, Jr., No. 89729, and Nebraska Sensation, No. 108661. These boars carry the blood of great winners and producing hogs.

All stock guaranteed to be as represented. Address:

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My Hampshire Hogs have been selected with great care and my herd is one of the oldest in America. Herd headed by El Salvador, winner of two silver cups in the strongest competition of the middle west. Fifty young sows and boars for sale. This breed has won over all others in the dressed carcass contest for several years at the International Fat Stock Show.

If interested in the best Irrigated Valley in the U. S. write for circular.

FRANK REED SANDERS

Salt River Valley, Mesa, Arizona

I HAVE DUROC JERSEY HOGS

150

All eligible to registration, that I wish to sell for \$1500. Have no feed and no time to give them my attention. A number of sows are with pig.

C. L. De Ryder,

Pleasanton, Cal.

POLAND CHINA SWINE

I have for sale pigs of both sexes sired by my boar, Great Prospect (57949) out of sows sired by A. Wonder. For prices write or call.

BROWNING STOCK FARM, WOODLAND, CALIFORNIA

W. H. BROWNING, Prop.

DUROC Jersey Swine

Young stock of both sexes for sale, sired by Junior 1st (121831), who is the sire of my young herd which won the Duroc Jersey Association Special Prize at the 1912 California State Fair.

Write for pedigrees and prices.

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Artful Star Master 2d (139,843)



Farrowed April 2, 1909. Out of Premium Alexis 2d (194723), by Star Master (97071), out of Ulalah Star (59992), by Masterpiece (77000). Premier Alexis 2d, out of Alexis Belle 44th (104296), by Artful Premier (55555).

Artful Star Master 2d is a smooth boar of great bone, vitality and conformation.

For Further Information, Address

GREENFIELDS FARM,

Klamath Falls, Ore.

INBREEDING POLAND CHINAS.

M. Bassett, the well known breeder of Poland China swine, has been experimenting considerably with inbreeding, and is very well satisfied with the results he has obtained. The dam of Victor Meddler, reserve champion bear at the State Fair, is also his grand-dam. This method of breeding intensifies the blood line and gives a male the power to produce his like. It also intensifies any defects, and for this reason is not advised for any but master breeders like Mr. Bassett. Victor Meddler carries the blood of Meddler, champion at the St. Louis World's Exposition, and on his dam's side is closely related to Corrector, another great sire in his day.

THE LINQUIST DUROC JERSEYS

Linquist Brothers of Stanislaus County were among the new breeders who made their first entries this year at the State Fair. They are breeders of Duroc Jerseys, their foundation stock having been obtained from J. K. Fraser. They started with a bred sow and now have twenty head. Their herd boars are R. D.'s Beauty (122721) and King Golden (114719). The two members of the firm are young men, both ambitious and willing, and we are sure they will make good, as the Durocs are becoming more popular in this State right along, and there will be a steady demand for breeding stock.

Come to Stockton Poultry Show, November 13 to 17
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BAGGAGE CARRIED ON ALL TRAINS.

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7	7:10a	8:42a	9:00a
13	9:10a	10:45a	11:05a
17	10:15a	11:45a	12:05p
23	12:15p	1:45p	2:03p
25	2:15p	3:45p	4:00p
35	4:15p	5:45p	6:05p
41	6:00p	7:42p	7:52p
47	10:10p	11:40p	12:01a

NORTHBOUND.

No.	Leave Stockton	Leave Lodi	Arrive Sac'to
6	6:45a	7:00a	8:30a
10	7:45a	8:00a	9:35a
16	10:00a	10:10a	11:45a
22	12:05p	12:15p	1:50p
28	1:45p	2:00p	3:35p
32	4:00p	4:10p	5:45p
40	6:45p	6:00p	7:35p
46	8:00p	8:15p	9:42p

STOCKTON-LODI SERVICE.

Leave Stockton.
A. M.—5:15, 6:00, 7:00, 8:00, 9:00, 10:05, 11:00.
P. M.—12:10, 1:05, 2:00, 3:00, 4:05, 5:00, 6:00, 7:00, 9:10, 11:05.
*Daily except Sunday.

Trains Leave Lodi.

A. M.—6:05, 7:00, 8:00, 9:00, 10:10, 11:00.
P. M.—12:15, 1:00, 2:00, 3:00, 4:10, 5:00, 6:00, 7:00, 8:15, 10:00, 11:55.
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At Stockton with Santa Fe for San Joaquin Valley points.

L. H. RODEBAUGH,
Traffic Manager, Stockton.

THE KENNEDY TAMWORTHS.

Among the breeders who appeared at the State Fair for the first time this year were Kennedy Brothers of Merced County, who are breeding Tamworths. Their foundation stock was purchased from H. B. Wintringham of Lake County, and now they have about sixty head in all. The Kennedys are progressive young men and will, no doubt, be heard from in the future. California farmers do not raise enough of the bacon type of hogs, and the Tamworths are bound to become more popular when their merits become more generally recognized. The Kennedys expect to be in a position to show nearer to the age limits next year, and expect to carry off a bunch of blue ribbons at that time.

THE JOHNSON DUROC JERSEYS.

E. E. Johnson of Stanislaus County has been breeding Duroc Jersey hogs for two years, but made his first appearance in public at the State Fair of this year. He now has a herd numbering fifty-two, which is headed by Junior I (121831), who was brought out from the East by Mr. Johnson. The sire of this boar recently sold in the East for \$4000, which would indicate that he is about as good as the best of them. Mr. Johnson won the prize offered by the National Duroc Jersey Registry Association for the best herd of a boar and three sows shown at the California Fair. Mr. Johnson is a young man and hopes to devote many years to building up his herd of Durocs.

A. B. Humphrey of Grapewild Farm Sacramento County, had nineteen entries of Berkshires at the State Fair and took sixteen prizes with them out of a possible thirty-four, which is good enough for any one breeder.

Harry Murphy of Perkins, Cal., would have won the Berkshire cup for the best herd at the State Fair had it been awarded. One of the conditions is that there must be three herds entered for it, and although the herds were there only two had made entries to compete for this handsome trophy.

JERSEY BREEDER BRANCHING OUT.

J. E. Thorp of San Joaquin County, who is known to our readers as one of the prominent Jersey breeders of the State, being Secretary of the association, is now devoting a portion of his attention to breeding Duroc Jersey hogs. Not that he is going to neglect his favorite dairy cattle, but because he recognizes the splendid field offered in this State for hog breeding, especially when it can be carried on in conjunction with dairying. He obtained his foundation stock from the Conner herd in Santa Clara County, and had a few entries at the recent State Fair.

F. W. Harding of Wisconsin was among those from a distance who visited the recent State Fair. Mr. Harding was particularly interested in the sheep exhibits, and said that although the entries were not shown in as high condition as in the East, there was a lot of quality in evidence. Mr. Harding has recently bought sheep on this coast and taken them East on account of not being allowed to bring his usual importations from Europe, so it is evident that he recognizes this section of the country as a producer of desirable breeding types.

Goats will breed at 6 months of age, but this early breeding destroys vitality. Eighteen months is about the right age for breeding.

HERE IT IS

The man who has a home in the country—paid for, improved, attractive and income producing—is three blest. In fact, he is blest eight or nine times in the same place. Ever get that "back to the soil" bee in your bonnet? If you have, how does a place like this sound to you?

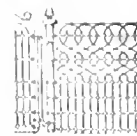
Five acres planted to walnuts, with alfalfa, fruit and garden to occupy the man with the hoe. A bran new, up-to-date bungalow that will delight HER, with all those little trimmings and fixings that delight a housekeeper's heart. Deep well, gas pump and thousand-gallon tank—with the whole ranch piped for irrigation. But this isn't all—fully equipped for poultry raising while the walnuts grow. Right now there are 400 chickens scampering through the alfalfa and waxing fat in the California sun. There is an incubator, brooder, seven chicken houses and a barn. What more could you ask for? And it's only 1½ miles from city limits. Come and see me about it. If you can't come, write me.

JOS. M. ANDERSON,

416 J Street, Sacramento, Cal.

A commendable move has been made by the United States Department of Agriculture in the establishment of an experiment station in Utah for the purpose of investigating problems of practical value in connection with regulated grazing. One of the objects of the study will be to learn how the maximum of grazing use of natural forests land may be obtained without injury to forest re-

production and stream flow, and it is hoped to determine practicable means of regenerating depleted ranges.



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Cheaper than Wood. Artistic Designs. Last Forever. Send for Catalogue.

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Also have for sale a few Registered Shorthorns of both sexes. Correspondence solicited.

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Stock of Various Ages, Both Sexes
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BERKSHIRE HOGS, DORSET SHEEP

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Breeder of Sonoma Girl 2:05½
Charley Belden 2:08½, etc.

Farm 2 miles west of Santa Rosa on the Electric Railroad. Fare, 5 cts.

TAMWORTHS

THE BACON BREED

Pigs for immediate delivery.

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BREEDERS OF
HOLSTEIN AND JERSEY CATTLE, POLAND CHINA AND
BERKSHIRE HOGS, PERCHERON AND CLYDESDALE HORSES
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Power on the Farm

WHY GAS ENGINES "GO."

Among the 25,000 dealers and the 600,000 gas engine users in this country, how many really know what makes the engine "go?"

The gas engine is the most simple power producing device imaginable. If properly understood, it is one of the easiest to keep in good working order. Misused by so-called "experts" who have not studied its principles of design and operation, a perfectly good engine which only requires a little cleaning out, or two or three turns of an adjusting screw, is often irretrievably ruined.

The main parts of the gas engine are the cylinder, piston and fly wheel. The piston and cylinder form a sort of pump. The piston rod is usually connected by a crank to a pair of rather heavy fly wheels. When the engine is turned the piston moves in and out of the cylinder, just like the piston in an ordinary water pump.

Now, there are two valves opening to the cylinder, one termed the "inlet" and the other the "exhaust." These are so geared that on the outward stroke of the piston (equivalent to the upward stroke of a well pump), the inlet is opened and a mixture of gasoline, oil or some other suitable fuel with air, is drawn into the cylinder. This fuel and the air are mixed by a device known as the "carburetor," which, next to the "ignition," is responsible for most of the engine troubles.

The cylinder is now full of the gaseous vapor, which is, of course, highly explosive. The momentum of the fly wheel now forces the piston back against this mixture, and the inlet valve being closed, the mixture is compressed. When compressed to the full extent, an electric spark is produced in the mixture, which is exploded, this driving the piston outwards with great force. This force turns the crank and the fly wheel, the latter smoothing out the impulses and making the engine run steady.

When the piston is driven out by the explosion, the outlet or exhaust valve is opened at the bottom of the stroke, and when the piston moves up into the cylinder again, it drives out the burnt gases that remain in the cylinder. This causes the puffing sound at the exhaust. After the cylinder is thus cleared of the burnt gases a fresh charge is taken in as just described, and so on as long as the engine runs.

The apparatus used for producing the spark which causes the explosion in the cylinder is often termed the "ignition," and this causes by far the majority of gas engine troubles. Up to the last year or two nearly all engines had batteries for furnishing the spark, and as these become exhausted sooner or later, the spark often failed and the engine would not run. This defect led to the development of the built-in engine timed magneto, which is a device geared to the engine and forming part of same. This furnishes a plentiful supply of current as long as the engine runs and requires no attention or renewal. The best type of magneto has means for checking the timing by simply looking at same, no careful measurements or expert adjustments being necessary.

These magnetos should not be confused with small dynamoes driven by belt or a friction wheel bearing against the face of the engine fly wheel, as such dynamoes often cause trouble on account of the high speed at which they must run. The built-in magneto is universally used on automobiles.

Those who are wise will carefully

study the instructions sent with their engines. These instructions are simple and any one can understand them. Study why and how your engine "goes," so that in case of anything going wrong you can locate the trouble as it is seldom necessary to tear the engine apart to make repairs. Those about to buy an engine should specify that it should have a "built-in" type of magneto having visible timing, a good carburetor, well made bearings and a strong guarantee as to material and workmanship.

EXPOSITION WILL STIMULATE SALES.

In his preliminary statement the Chief of the Live Stock Department of the Panama-Pacific International Exposition makes the statement that there will be extensive buying of purebred sires and dams during the progress of the exposition.

One Oregon breeder has shipped 195 purebred rams to Honolulu in fifteen months. Every boat that goes to China and Japan carries registered cows and hogs. Central American and South American breeders have already signified that they will come to San Francisco in 1915 for their needs. The breeders of the Pacific Coast are back of the statement that no exhibit of merit in any of the divisions will be returned to its point of origin unless its owner has unreasonable ideas of value.

The American Consuls in every country that will be interested in live stock development, either from an exhibiting, buying or selling standpoint, have been asked to furnish the Live Stock Department of the Panama-Pacific International Exposition with the names of societies, firms and individuals so that they may be corresponded with and enlisted in the campaign for the world's greatest live stock show. The responses being received are numerous and betray interest that is universal.

R. M. Dunlap, herd manager for the Simon Newman Co., sold out all the Herefords he had to offer at the State Fair, and could have sold more. A number of parties who were disappointed in not being able to make a selection at the Fair arranged to go to the company's ranch to pick bulls they wanted. This speaks well for the popularity of the Herefords. Mr. Dunlap always has his stock in a condition that appeals to a breeder, and knows how to make the sales when a prospective purchaser is in sight.

Professor Carlyle of Idaho, who judged the dairy stock and the horses at the State Fair, attended a California fair eleven years ago. He says that there has been a wonderful growth of the live stock department since that time, and was pleased to note that there has been a big improvement in the standard of the stock.

THE SLOCUM DUROC JERSEYS

H. P. Slocum & Son of Glenn County, Cal., had a splendid herd of Duroc Jersey swine entered at the State Fair, being numbered among those breeders who participated in the live stock show there for the first time. The Slocums came out from the East last April, bringing 75 head of Durocs with them. They have found California conditions ideal for swine breeding, and are enthusiastic regarding prospects for the future. They have arranged to bring out from the East to head their herd one of the best boars of the breed obtainable. They already have a splendid individual in Foxey Model (122495), champion boar at the State Fair. His sire has produced more champions in the East than any other boar of the breed, and is regarded as one of the greatest Duroc sires living.

(Continued from page 1.)

Roselawn 29th; third, Harbinson on Red Topsy.

Cows, 2 years old and over—J. H. Glide on Queen of Greenwood; second, University Farm on Lustrous; third, T. S. Glide on Greenwood Bride; fourth, T. S. Glide on Louella of Valley View.

Senior yearling cow—First, Gibson on Roselawn 43d; second, Howard on Bapton Queen; third, University Farm on Belle of Wayside; fourth, Paicines on Penny of Paicines.

Junior yearling cows—First, T. S. Glide on Louella Lancaster; second, University of Idaho; third, Howard on Archness 24th; fourth, T. S. Glide on Hillcrest Lady.

Senior calf—First, T. E. Gibson on Roselawn Queen 56th; second, Howard on Countess Churchill; third, Howard on Winsome Countess; fourth, Howard on Hopeful Countess.

Junior calf—First, Gibson on Roselawn Mary 57th; second, T. S. Glide on Lady Perfection; third, Paicines on Paicines Nora; fourth, Paicines on Paicines Amelia.

Senior champion bull—J. H. Glide on King Lancaster 2d.

Junior champion bull—T. S. Glide on Greenwood Knight 2d.

Grand champion bull—T. S. Glide on Greenwood Knight 2d.

Senior champion cow—J. H. Glide on Queen of Greenwood.

Junior champion cow—Gibson on Roselawn Queen 56th.

Aged herd—T. S. Glide.

Herd of two heifers under 1 year, bull under 2 years, two heifers 1 year old and under 2—First, Gibson; second, Paicines; third, Howard.

Herd of one bull and two heifers under 12 months—First, Gibson; second, Paicines; third, Gibson.

Four animals of either sex, get of one sire—First, J. H. Glide; second, Gibson; third, T. S. Glide.

One cow—First, J. H. Glide, second and third, Gibson.

Two animals of either sex, produce of third, Gibson.

ABERDEEN ANGUS.

Aberdeen Angus were exhibited by University Farm and University of Nevada. The California college had only one bull entered and carried away the senior and grand championship with him. The Nevada college had a very good herd of five animals. This breed is unknown to many of the people of our Western country, and the smooth, black cattle attract much attention and admiration at the fairs.

Following are the awards:

ABERDEEN ANGUS.

Bulls, 2 years and under 3—First University Farm on Boswell of Meadowbrook.

Senior yearling bulls—First, U. of N. on Glenmere Prince.

Cows, 3 years and over—First, U. of N. on Blackbird Chloe.

Cows, 2 years and under 3—U. of N. on Blackbird Missle.

Junior yearling—U. of N. on Glenmere Queen 9th.

Junior calf—U. of N. on Chloe Ito Blackbird 8th.

Junior champion bull—U. of N. on Glenmere Prince.

Senior champion bull—University Farm on Boswell of Meadowbrook.

Grand champion bull—University Farm on Boswell of Meadowbrook.

Junior champion cow—U. of N. on Glenmere Queen 9th.

Senior champion cow—U. of N. on Blackbird Chloe.

Grand champion cow—U. of N. on Blackbird Chloe.

FAT STOCK.

The awards in the fat stock classes were as follows:



An Excellent Herd of Angus Cattle. Exhibited by University of Nevada, Reno, Nevada.

THE HEREFORDS.

In the Hereford classes a lone California exhibitor, Simon Newman Co. of Newnan, went up against all the ability of two colleges, the University of Idaho and the University of Nevada. The college stock had a little better of the deal from the fitted standpoint and carried away the championships, honors in this regard being about equally divided between the Idaho and the Nevada institutions.

The awards were as follows:

HEREFORDS.

Bulls, 3 years and over—First, University Farm on Prince Lad 11th; second, Newman on Young Donald.

Senior yearling bulls—First, Newman on Prim Lad; second, Newman on Latest Model; third, Newman on Artist.

Junior yearling bulls—First, University of Idaho on Curtis; second, Newman on Newman Star; third, Newman on Early Star.

Cows, 2 years old and under 3—First, University of Nevada on Pearl; second, Newman on Lenora B; third, Newman on Sweet Lass.

Senior yearling cows—First, University Farm on University Bright Hope; second, Newman on Sugar Plum; third, University of Nevada on Roselle.

Junior Calves—First, University of Idaho on Dona Perfect; second, Newman on Ring Mistress; third, University of Nevada on Ramona.

Aged herd—First, Newman.

Breeder's young herd—Newman.

Get of sire—Newman.

Senior champion bull—University Farm on Prince Lad 11th.

Junior champion bull—University of Idaho on Curtis.

Grand champion bull—University of Idaho on Curtis.

Senior champion cow—University of Nevada on Pearl.

Junior champion cow—University Farm on University Bright Hope.

Grand champion cow—University Farm on University Bright Hope.

PUREBRED STEERS OR SPAYED OR FREE-MARTIN HEIFERS. SHORTHORNS.

One year old and under 2—First, University of Idaho on White Cloud; second, University of Nevada on Whitelaw 1st. Grand champion shorthorn steer—University of Idaho on Whitelaw.

HEREFORDS.

Two years old and under 3—First, University of Idaho on Haykan; second, Simon Newman Co. on Newman Beauty.

One year old and under 2—First, University Farm on University Joe; second, Simon Newman Co. on Newman Beauty.

Grand champion Hereford steer—University of Idaho on Haykan.

PUREBRED, GRADE OR CROSSBRED FAT STEERS OR SPAYED HEIFERS.

Two years old or under 3—First, University of Idaho on Ike; second, Simon Newman Co. on Newman Beauty.

One year and under 2—First, University of Idaho on Andy; second, Simon Newman Co. on No Discount; third, University of Idaho on White Sox.

Under 1 year—First, University Farm on Thickest Boy; second, University of Idaho on Hucklester.

Best four head of steers or spayed heifers under 4 years—University of Idaho.

Sweepstakes.

Best fat steer of any age or breed—University of Idaho.

FAT BARROWS.

Best fat barrow of any age or breed—First, second and third, M. Bassett of Hanford on Poland Chinas.

Pen of three fat barrows—First, M. Bassett on Poland Chinas; second, Fruitts & Bollman on Hampshires.

The consensus of opinion of those who viewed the Gibson herd of Shorthorns at the State Fair was that if Ed Brown is given half a chance he knows how to fit cattle for show. Ed has been in the business long enough to know the ropes. His face is a familiar one about the Fair grounds, and he is noted for a "smile that won't come off."



SHEEP



Sheep at the State Fair

Eight breeds of sheep and one of goats made a good showing in this department of the State Fair. To the University of Nevada is due much of the credit for the big show, that institution bringing representatives of even breeds to the Fair, the only entries in several divisions being those of the Nevada college.

Purebred registered Ramboulllets were shown only by the University of Nevada. The Bullard Company of Woodland, Cal., had a big showing of Ramboulllets under class 1-B, registration not required, and Ed Schoel of Oregon also had entries in this class. The Bullards annexed most all of the ribbons. Through years of careful breeding they have established a type of their own that is hard to beat.

In Southdowns there was some little competition, the exhibitors being J. G. Hubbard, Corvallis, Ore.; University of Nevada and University Farm. The agebrush sheep grabbed both the championships.

In Shropshires Bishop Brothers of San Ramon and Howard Cattle Co. of San Francisco both had big exhibits. Other exhibitors were University of Nevada and University Farm. The Bishop took most of the ribbons, as well as both championships. Their Ram, Gibson, winner in aged ram class and champion, is typey, compact and deep covered. He was winner of second prize in the American-bred class at the International in Chicago in 1911. Marshall 57, champion ewe, is a Bishop-pure animal. She is low set and deep throughout, has a very hoody fleece and is feminine and breedy in appearance. The Bishop Shropshires were all fitted in the most exquisite manner, and would have done credit to the firm at any show. The Howard sheep were all California-bred, and were a nice, uniform lot, but not quite so highly fitted as the Bishop flock.

The University of Nevada had the only flock of Hampshires, and C. P. Kizer of Harisburg, Ore., the only flock of Oxfords. With the exception of two entries by the University of Nevada, the Oregon Live Stock Co. of Corvallis had all the Lincolns that were shown. There was a flock of Dorset Horns shown by the University of Nevada and one by F. R. Sanders of Mesa, Ariz. University of Nevada exhibited the only Cheviots. Florence of Redding, Cal., had the only entries of Angora goats. Major (68487) a particularly fine billy, and was greatly admired because of his long, lanky fleece. He is said to be one of the finest bucks on the coast.

The full list of sheep awards follow:

SHROPSHIRE.

Rams, 2 years old and over—First, Bishop on R. Gibson 1035; second, Bishop on P. R. Jr. 105; third, Howard on Howard's 114-10.

Rams, under 2 years and over 1—First, Bishop on Bishop 33; second, Bishop on Hindmarsh; third, Howard on Howard's 19-11.

Rams, under 1 year—First, University of Nevada on Nevada's 205; second, Bishop on Bishop 101; third, U. of N. on Nevada's 201.

Ewes, 2 years and over—First on U. of N. on Cavendish's 207; second, Bishop on Suttar's 546; third, Bishop on W. O. 993.

Ewes, under 2 years and over 1—First, Bishop on Marshall 57; second, Bishop on U. of N. 17; third, U. of N. on Nevada's 8.

Ewes, under 1 year—First, Bishop on Bishop 134; second, Bishop on Bishop 133; third, U. of N. on Nevada's 206.

Flock—First, Bishop; second, Bishop; third, U. of N.

Champion ram—Bishop on R. Gibson 1035.

Champion ewe—Bishop on Marshall 57.

SOUTHDOWNS.

Rams, 2 years and over—First, U. of N. on Babraham Seaman; second, Hubbard on Martin 76 A.

Rams, under 2 years and over 1—Hubbard on Hubbard 57.

Rams, under 1 year—U. of N. on Frank Kleinheinz; second, U. of N. on Bob La Follette; third, Hubbard on Hubbard 98.

Ewe, under 2 years and over 1—First, U. of N. on Fairbairn's Ewe 60; second, Hubbard on Hubbard's Ewe 40; third, U. of N. on Belle 741.

Ewe, under 1 year—First, University Farm on Major's 73; second, U. of N. on Babraham Fairy 34 215; third, U. of N. on Babraham Alcott 4th 213.

Flock—First, U. of N.; second, Hubbard.



R. Gibson (1035), Champion Shropshire Ram. Exhibited by Bishop Bros., San Ramon, Cal.

Pen of four lambs—First, U. of N.; second, Hubbard.

Champion ram—U. of N. on Frank Kleinheinz.

Champion ewe—U. of N. on Babraham Alcott 476.

CHEVIOTS.

Rams, 2 years and over—Reno 211.

Ram, under 1 year—Reno 2d 216.

Ewe, 2 years and over—Lizette 265.

Ewe, 1 year and under—Lizette.

Ewe, under 1 year—Wisconsin.

Flock—U. of N.

Champion ram—Reno 211.

Champion ewe—Lizette 265.

FRENCH MERINOS.

(Purebred and Registered.)

Ram, under 2 years and over 1—University of Illinois 288.

Ewe, 2 years and over—University of Illinois 208.

Ewe, over 1 year and under 2—University of Illinois 286.

Ewe, under 1 year—U. of N. Champion ram—University of Illinois 288.

Champion ewe—University of Illinois 286.

FRENCH MERINOS.

(Range Sheep, Purebred But not Registered.)

Ram 2 years and over—First, Bullard on Yolo King.

Ram, over 2 years and under 1—First, second and third, Bullard on Gift Edge, Little Giant and Bullard's Ringleader.

Ram, under 1 year—First, second and third, Bullard on Yolo Chief, Bullard Best Yet and Woodland Chief.

Ewe, 2 years and over—First, second and third, Bullard on Woodland Princess, Yolo Maid and Fluffy Ruffe.

Ewe, over 1 year and under 2—First, second and third, Bullard on Woodland Bell, Bullard's Pride and Nellie Bly.

Ewe, under 1 year—First, Schoel on 103; second and third, Bullard on Shepherd's Pet and Mayflower.

Flock of four—First and second, Bullard.

Pen of four lambs, get of one sire—First and second, Bullard.

Champion ram—Gift Edge.

Champion ewe—Woodland Bell.

DORSET HORN.

Rams, 2 years old and over—First, U. of N. on Tranquility 1986; second, Sanders on Experiment Station 171.

Rams, under 2 years and over 1 year—U. of N. on Nevada's 129.

Rams, under 1 year—First and second, U. of N. on Nevada's 223 and Nevada's 225.

Ewes, 2 years and over—First, U. of N. on Tranquility 1180; second and third, Sanders on Experiment Station 83 and 78.

Ewes, under 2 years and over 1 year—U. of N. on Nevada's 430; second, Sanders on Experiment Station 309.

Ewes, under 1 year—First and second, U. of N. on Nevada's 222 and Nevada's 220; third, Sanders on Sanders 3.

Flock First, U. of N.; second, Sanders.

Pen of four lambs—First, U. of N.; second, Sanders.

Champion ewe—U. of N. on Nevada's 430.

Bishop Brothers of San Ramon, Cal., sold their Davidson ram that was champion at the Oregon fair to M. Ross of Hillsburg, Ore., at a fancy figure.

Five of the splendid Oxford sheep shown at the State Fair by C. P. Kizer of Oregon were shipped direct from the fair grounds by W. M. Carruthers to fill an order from Central America.

Reference: Exchange Bank, Santa Rosa.

MAURICE MEYER,

P. O. Box 325 Santa Rosa, Cal.

Street Address, 1014 Second St.

Best Market Prices Paid For

PELTS, FURS AND MOHAIR

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San Ramon Shropshire Flock

PUREBRED AND GRADE RAMS ALSO EWES, FOR SALE. INDIVIDUALS OR CARLOAD LOTS.



First Prize Ewe Lamb at Omaha BISHOP BROS.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

We will sell 120 Grade Ewe Lambs originally selected for our own breeding flock. All by imported rams out of ewes from which we sell our grade rams. We consider them the best lot of grade ewes we ever had. They are fat and in fine condition. Owing to shortness of feed we will sell them at a very low figure.

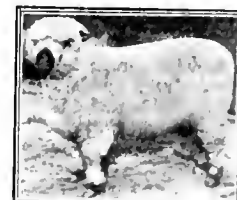
Our grade flock at the State Fair, 1911, took every first and championship.

PRIZES WON BY FLOCK, 1911.

California State Fair—Thirteen out of fifteen first prizes and all of the four championships.

Omaha—First and second ram lambs; first and third ewe lambs.

Our grade rams are raised on the open range.



First Prize Ram Lamb at Omaha San Ramon, California

Sheep Raising in Connection With General Farming

(By W. F. Stevens, Live Stock Commissioner, Province of Alberta, Edmonton, Alta., in the Dry Farming Congress Bulletin.)

As swine growing is the natural adjunct of dairying, so sheep is the natural accompaniment of extensive wheat farming. The ability to utilize and turn to account what would otherwise be waste products is the determining factor in each case.

The by-products of the wheat farm are weeds, volunteer grains and grasses, weed seeds, shriveled grain and straw. The first four sheep will utilize to better advantage than will any other kind of live stock, and only beef cattle and horses will surpass sheep in turning wheat straw to account.

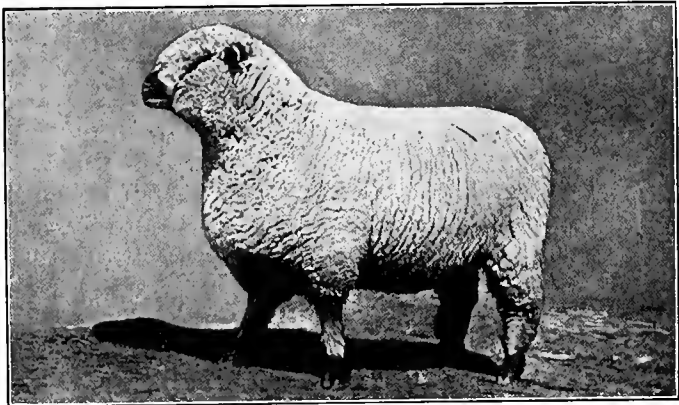
Another reason why sheep should appeal to the extensive wheat farmer is that once he has installed the proper equipment, such as fences, open sheds and watering places, they interfere little with his field work. In fact, it is very doubtful if the extra work they occasion during the busy season is not more than offset by the labor they save on the summer fallow in the way of soil packing, weed eradication and the spreading of manure.

Another fact worth consideration is that the presence of a flock of sheep on a grain farm does not necessitate a material reduction in the area devoted to grain growing, but on the

The next step is to secure the right kind of sheep. When selecting these, two things should be kept well in mind. They must be of a breed that are noted for being quick to get on their feet after being lambled, else they will require a great deal of attention at lambing time, which, coming as it does in the midst of seeding, the farmer can ill-afford to give, and they must be well woolled on the under line, else they will spend too much time about the shelter during the winter months. They will require much more haid feeding and be much more likely to contract disease than they would if they got out every day on clean ground and in the clear air and sun light.

Managing a Flock.

In managing a flock of sheep it should be remembered that a variety of feed is indispensable. When they are on succulent feed they should have daily access to dry roughage; when are on succulent feed they should have occasional access to something succulent. A little attention to this important matter will prevent loss from indigestion, which has probably caused greater losses among farmers' flocks than any other ailment. A field of native prairie or of bromo grass in which there is a pile of straw or a rack of hay to which they can go at will, in order to get a change of feed while



Marshall 57, Champion Shropshire Ewe. Exhibited by Bishop Bros., San Ramon, Cal.

other hand it never fails to insure a larger yield of better grain, and it makes possible the growing of grain for a longer period of years than can be done without them, or some other kind of live stock.

Start of Sheep Raising.

A certain amount of technical knowledge regarding sheep, their habits, etc., is necessary to success, but the same is equally true of all classes of animals, and amateurs should acquire this knowledge with a small flock in order that their mistakes do not cost them too dearly.

The first step to be taken when embarking in the business of sheep raising is to enclose at least one field with a coyote-proof fence. Additional fields similarly enclosed should be provided as occasion requires, or one's means permit. An effective dog and coyote-proof fence can be made by using a woven wire fence four feet high and attached to the inside of the posts. A strand of barbed wire should be run along the surface of the ground, and another about six inches above the top of the woven wire fence. These should be attached to the outside of the posts. This arrangement makes burrowing under and vaulting over the fence from the outside very difficult. A woven wire fence 36 inches high with one strand of barbed wire above it is usually sufficient for inside or cross fencing.

cleaning the summer fallow, and another field sown to winter rye early in August, to which they can go occasionally for succulent feed during the winter and spring months, are all that is necessary.

The present is a favorable time to secure foundation stock, because they can be purchased at moderate prices. The sheep ranchers are reducing their herds because of scarcity of pasture, and the large numbers going to market are keeping prices at a low level. But once this reduction of herds stops, prices will rise. They will probably not soar as have the prices of cattle and horses, because the frozen mutton of Australia and New Zealand will be drawn on to prevent excessively high prices, but the trade that refuses to accept the frozen article is sufficiently large to permit of a material advance in mutton prices, and this advance is sure to take place as soon as the big ranges have been depleted.

It is announced that the total amount available for participation of California counties in the Panama-Pacific Exposition is already \$915,904, with more to come. This should permit the counties of this State to make a showing that will be a marvelous manifestation of our agricultural resources.

HILLCREST STOCK FARM

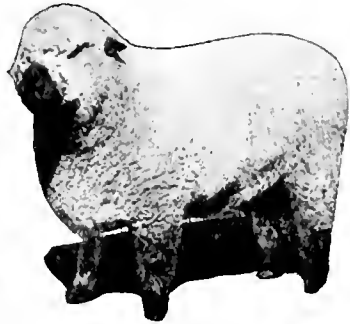
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SHORTHORN CATTLE

SHROPSHIRE and
MERINO SHEEP



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First Prize Ram at State Fair, 1911

OFFERS FOR SEASON OF 1912
AN EXCEPTIONALLY FINE LOT OF
PURE-BRED AND REGISTERED
RAMS, YEARLINGS AND TWO-
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Wool, Hides, Grain, Dried Fruit, Dressed and Live Poultry Wanted

For the best results and to get the most money out of your different kinds of Produce, ship the same to us. Highest market prices and immediate cash returns guaranteed. Send us samples before selling elsewhere. Liberal advances made. Mark and consign your shipments direct to

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3 Yearling Shropshire Rams 3 Yearling Hampshire Rams

FOR IMMEDIATE DELIVERY. ALL OUT OF IMPORTED STOCK.

PRICES REASONABLE.

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I OFFER FOR SALE

1400 Yearling Rams

1000 Ewes

Prompt Delivery Correspondence Invited



CHAS. A. KIMBLE

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SHROPSHIRE
RAMS

50 Yearlings 75 Lambs

Splendid Individuals at
Reasonable Prices

G. K. SWINGLE, Davis, Calif.
Phone Davis 406

SHROPSHIRE RAMS

140 Head of Yearling Shropshire Rams.

150 head of Ram Lambs.

These are all of my own breeding, and the choicest lot I have ever had.

Also Duroc Jersey Hogs.

ENTERPRISE FARMS

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University of Nevada

RENO, NEVADA.

Breeders of

Percheron Horses.
Holstein-Friesian, Jersey, Aberdeen Angus and Hereford Cattle.
Shropshire, Hampshire, Southdown, Dorset-Horned, Rambouillet
and Cheviot Sheep.
Berkshire and Poland China Hogs.

Correspondence Solicited.

The Newman Fair

The Live stock show at the Fair this year loomed up big in beef cattle and horses. The dairy display of purebreds was better than in former years, and while the herds of Holsteins and Jerseys exhibited by the breeders were small, the class was there.

The Simon Newman Hereford showing was the best exhibition of white faces seen in this State in many years. Registered Herd Manager R. M. Dunlap had twenty-one individuals lined up. The aged bull, Young Donald, recently brought out from Iowa, was the center of attraction. The yearlings were in prime condition, nicely groomed and gentle as kittens. Artist 1st, Latest Model and Newman Goods are a trio hard to beat, and won first, second and third, respectively. The bull calf and heifer calves in this herd are a classy lot. The cows, Sugar Plum and Lemon B., are females of promise. This herd as shown at the fair goes in its entirety to Sacramento and to the San Joaquin Valley fairs, bringing a lot of advertising to Newman.

The Shorthorn herd of the Howard Cattle Co. was up to the usual high standard maintained by Howard. Manager Harvey, while a new-comer to Newman, already has the boost spirit, and while this was his first fair, he mixed with the cattle buyers and was always ready to show the stock. Straight Archer XI, prize winner at Sacramento last year, heads the herd again. He weighed 2100 and seemed, indeed, happy in his surroundings. Joe Henry, herdsman of the registered division on the Howard ranch, and who has "brushed 'em off" in many a show ring, had his stock in fine shape. Howard has always aimed to bring West the best blood obtainable.

C. R. George, from the State Farm at Davis, judged the live stock and poultry. His lectures as he pinned on the ribbons were interesting, and the breeders all over the grounds would flock around him and listen to his talk on what constitutes a true type of the breed. In the Shorthorn and Holstein classes especially he gave a talk that won the admiration of many an old-timer in the show ring.

Jerseys were shown by Marshall Newsom & Co. and J. H. Kaufman. The latter won the championship, though Manuel Marshall was a close second with a fine animal in Marshall's Geronimo (94542). Mr. Kaufman had a splendid showing in Holsteins and the Hubbard & Carmichael herd, piloted by the energetic superintendent, Frank Kohrs, gave the bunch a run for the money in every class of black and whites. J. Hansen's yearling bull, Filled Korndyke Prince (90358), was an outstanding individual. This bull came from the famous Morris herd at Woodland, and Mr. Hansen proposes to raise nothing but purebreds, and he has the right kind of blood in his young sire to start with. Mr. Hansen deservedly received the blue ribbon in the yearling class. The aged bulls in the Holstein class in the herds of J. H. Kaufman and Hubbard & Carmichael would do credit to any herd. Mr. Kohrs annexed the champion cow ribbon. Stevenson & Wagner received first for a senior yearling cow and first and second for aged cows and third on bulls. This firm has some excellent grade females, and are building up their herd so that many of their helpers are three-quarters pure. Their herd bull is a purebred, and his get are in great demand.

The Percheron stallion class was small this year. D. B. Thompson of Modesto brought over Sansonett and won first prize, competing with L.

W. Hutchinson of Fairview. The Thompson horse has size and bone and good action. Mr. Thompson also annexed a blue ribbon with a 2-year-old grade mare. The Shire stallion class had only one entry in R. C. Lathrop's good black, receiving the ribbon, and he was awarded the sweepstakes over the Percheron prize winner. Mr. Lathrop, by the way, received a half-full of ribbons, as his saddle horse won the vacuero class, and his brood mare, with foal, was also decorated. He received also the sweepstakes for brood mares.

The standard bred stallion, Sonoma King, of T. W. Cheney of Turlock, won first prize and sweepstakes. Sonoma King (47879) is a full brother to Sonoma Girl, 2:04 $\frac{1}{4}$. His sire is Lynwood W. (32853), dam Maude Fowler. The Turlock horse makes the season at the Melon Center, and although he was taken off the track very young he has a record of a quarter in thirty-one seconds as a yearling.

A. Dobrzensky had a big string showing and won first prize for families in the Standard bred class. He also showed Supervisor Clary's mare with foal and won a first, as did his yearlings. George Crow had a fine showing of jennets, with colts by side, and also had entered a magnificent specimen of purebred jack.

There were some black and white Minorcas shown by J. H. Kaufman in the poultry show that deserve special mention. Also the Buff Orpingtons of Stevenson & Wagner and the Buff Cochins of George Crow.

WELL KNOWN BREEDER BADLY INJURED.

Frank Reed Sanders of Mesa, Ariz., the well known breeder of Dutch-Belted cattle and Hampshire swine, was the victim of a very serious and painful accident while en route from Oregon to California.

He had exhibited at the Salem fair, and had sent all his show stock down to California in charge of his men, while he himself stayed in the north to complete the purchase of a herd of Dutch-Belted. Having purchased them he started for Sacramento with them and was getting along nicely until his train was down near Weed.

At this point a part of the train broke loose. Mr. Sanders being in one of the runaway cars. Brakemen made a desperate attempt to set the brakes on the train, but it rushed down the grade and Mr. Sanders jumped, landing in a barbed wire fence and sustaining a broken arm, numerous lacerations about the head and hands and a terrific shaking up. He was fortunate to come out alive.

He is at present in a Sacramento hospital, where he is gradually recovering.

At the State Fair the Sanders Dutch-Belted herd made a fairly clean sweep of the prizes regardless of the fact that its owner was not present to give them his attention. The herd contains some of the best individuals of the breed ever seen here, and the new stock which Mr. Sanders purchased in the north is a valuable addition to the herd, particularly one bull which is not in good show condition at present, but has the type which the Dutch-Belted breeder strives for.

Mr. Sanders' accident will probably prevent him from taking a number of his cows to the International Dairy Show.

The purebred male is the forerunner of prosperity, the missionary of success.—M. H. Gardner, Superintendent of Advanced Registry.

BE THERE!

San Ardo! San Ardo!

Remember the Date

October the Tenth Horses at Auction

The best lot of draft stock in the Salinas Valley.

70 head of horses, mares and colts, mostly Percheron stock.

25 brood mares weighing from 1400 to 1700 pounds.

30 geldings, ages 5 to 8 years, weighing 1400 to 1700 lbs.

Several spans of matched dappled grays in this lot.

10 2-year-old fillies.

10 head cattle, cows and steers, from 2 to 5 years old.

This is an absolute sale on account of retiring from farming. All implements and tools will be sold. Free Spanish barbecue.

Terms of sale: All sums of \$50 and under cash; sums over \$50, ten months' time on approved joint notes, with interest at 8 per cent.

All trains going north or south stop at San Ardo.

RHOADES & RHOADES,
Auctioneers.

WILLIAM BRINAN,
Owner.

ONE MILE EAST OF SAN ARDO, CALIFORNIA.

There is no Flour better than

Phoenix Flour

You cannot make a mistake by using it.

It has been made by the present management for over thirty years, and has gained in popularity every since.

For sale at all grocers. Ask for it.

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TANKS

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**WINDELER'S PLANING MILL
AND COOPERAGE**

Geo. Windeler, Prop.

Water Tanks, Wine Tanks made from carefully selected stock by careful and experienced workmen. "Tanks that are well made last a long time." It will pay you to get my prices before buying.

GEO. WINDELER,

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Wine Tank



Water Tank

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

VETERINARY

We cordially invite the readers of *The Live Stock and Dairy Journal* to consult this department. Questions will be answered free by mail, and a stamp should be enclosed for return postage. Give age, color and sex of animals, with full details of symptoms and conditions and previous treatment, if any.

The Live Stock and Dairy Journal—
A boar belonging to my neighbor, Mr. W., seems to have kidney trouble, which I think was caused by overwork, he having been given too many sows. He is a fine Duroc Jersey, 10 months old. Please tell me what you do for kidney trouble, and would it be safe to breed more sows to him when he gets well and strong. I am feeding the boar barley soaked in lye from oak ashes.—C. R. C., Santa Maria, Cal.
Rest the boar from breeding. More exercise with less feeding are essential for boar's condition. Lye on the barley is not advisable. Beet and other roots should be fed. Several months of this will put him in shape for breeding.

The Live Stock and Dairy Journal—
Have herd of 32 cows and heifers, only two of which (10 and 15 years, respectively) are over 6 years old, and a number are with first calf or have not yet dropped first calf. They are mostly Jerseys, and a few are part Holstein. Have one Jersey bull. We have great difficulty in getting many of our cows with calf. Several had dropped calf before we bought them, come in heat as frequently as sixteen to twenty days and have considerable discharge (glairy and whitish) at period of heat, which often lasts two days. Four had fine, healthy calves, full time. Two came in heat in nine days, became pregnant. Two did not come in heat till nearly twenty-eight or thirty days, and have returned at periods of eighteen to twenty days, and are not yet with calf. Three carried calves full time, calves alive, cows had considerable discharge, heat in nine days, poor flesh, cannot get with calf. Three cows lost calves, one about seven months and others within a week of full time, but calves very poor and not mature. All these cows came in heat in nine days, have considerable discharge at time of heat, and are not yet with calf at end of four months.

Last year all our cows had their calves and seemed well, fine flesh and good flow of milk, but most of them did not become pregnant for from four to six months after dropping calf.

This year all fresh cows give less than half their usual amount of milk, several quite poor, on same feed as last year.

We are unable to decide for ourselves whether the cows are afflicted with abortion or leucorrhoea, if with either, and ask your opinion as to disease and treatment. We have used several other bulls besides the one we have now, so it cannot be his fault.—C. D. M., Sutter, Cal.

You have both abortion and leucorrhoea in your herd. Douche every third day with a normal salt solution (6/10 of 1 per cent) of table salt in water, using about three gallons and inserting sterilized tube directly into womb. Two to three weeks of this is sufficient. It is also advisable to give douch one hour before service of bull. We would also advise this treatment after calving. Kindly report success or failure.

D. O. Lively, Superintendent of the Department of Live Stock, Panama-Pacific International Exposition, San Francisco, 1915, was an interested visitor at the California State Fair, and commented favorably upon both the numbers and quality of the purebred animals exhibited.

PRIZES FOR GROOMS.

The prizes for grooms awarded at the State Fair were a step in the right direction, and the boys of this and future Fairs may be interested to know that the idea originated with Tom Gibson of Woodland, who broached the matter to the State Board of Agriculture.

The offer of the \$100 prize certainly had a mighty good effect on the appearance of the live stock exhibits, and next year the boys will have a chance to prepare for it months beforehand, as the fitness of the stock in their stalls has much to do with the award.

The first prize of \$50 was awarded to C. J. Maurer, herdsman of Grape Wild Farm, and a man who can win first money in an award of this kind on a swine exhibit surely deserves a lot of credit, for, as most people know, pigs are not the daintiest animals in the world. Mr. Maurer had his pens very attractively decorated with yellow Chrysanthemums with green leaves, and these against the white-washed background made an especially attractive appearance. His pens and stock were all kept in excellent shape during the week.

The second prize was awarded to Norman Hale, with the Simon Newman Herefords. Norman did not go in for any fancy trimmings, but he did give a most effective demonstration of what can be done to maintain neat stalls and well groomed cattle by the use of clean straw, clean water and soap and a little elbow grease.

Third prize went to the groom in charge of the fine saddle horses exhibited by Mrs. E. P. Riggie. In this instance, besides having the quarters in spick and span shape, there was the condition and quality of the stock to be considered.

Fourth money went to Harry Clark, with Henry Wheatley at the Shire barn. As the condition and quality of stock entered largely into the awards it would have been hot competition, indeed, if this stable had not come inside the money, for Harry Clark had in the stalls what is pronounced universally to be the best lot of Shires ever gathered together in one barn on the coast.

One of the most attractive exhibits on the grounds was that of J. Crouch & Son. Their barn was beautifully decorated, and stock in fine condition, there being four grand champions in their barn.

Artful Masterpiece, grand champion boar at the State Fair, and Jeanette Lee, grand champion sow, have been taken to Four Oaks Farm at Woodland, and will be mated with a view of entering their progeny for the big Exposition in 1915. Messrs. Harold and Murthy, respective owners of these two splendid individuals, are among the most successful swine breeders in this Western country, and their judgment in mating the two prize winners cannot be questioned.

A successful breeder suggests that before shipping hogs they be taken off feed, when they can be safely handled. A hog with a full stomach is much more apt to die under shipping conditions than a hungry one, especially in warm weather, and in moving breeding hogs this is a good point to bear in mind.

UNIVERSITY SHORT COURSES

Short courses at the University Farm are being held at this writing. Among those yet to be held are the following:

Dairy Farming, October 7th to the 19th.

Animal Industry and Veterinary Science, October 21st to November 2d.

Horticulture and Viticulture, October 14th to November 2d.

Poultry Husbandry, September 23d to November 2d.

Dairy Manufactures, October 1st to November 21st.

Home Economics, October 21st to November 1st.

All short courses are open fully to all persons over 18 years of age.

GEORGE M. WHITAKER.

The dairy interests of the country lost a great friend and benefactor in the death of George M. Whitaker of Fort Atkinson, Wis. Readers of the *Journal* have become familiar with Mr. Whitaker's name principally through the communications published in these columns with regards oleomargarine legislation. As Secretary of the National Dairy Union he was always in the thick of the battle for the rights of the dairy industry, and to him was due much of the credit for the legislation against oleomargarine.

AT THE OREGON FAIR.

Bishop Brothers of San Ramon, Cal., had entries in the Shropshire sheep classes at the Oregon State Fair and won a number of prizes, including championships on rams and ewes.

Chas. G. Lathrop of Stanford University had his splendid Guernsey herd entered, and carried off some high honors.

F. R. Sanders of Mesa, Ariz., had entries in the Dutch-Belted cattle and Hampshire hog classes. His cattle captured championship honors in competition with the Dutch-Belted herds of Mrs. Jennie Strader and U. C. Strader of Stanislaus County, Cal. Mr. Sanders was represented in some of the sheep classes also.

J. F. Kelly of Mesa, Ariz., had entries in the Guernsey classes, and made some good winnings, including junior championship on Meta's Gay Lad.

Greenfields Farm of Klamath Falls, Ore., had entries in the Berkshire and Poland China classes, and carried off a share of the ribbons.

The hogs at the Oregon show were judged by C. N. Slocum of Willows, Cal.

A GOOD SHORTHORN SIRE.

T. B. Gibson, Woodland, Cal., has an exceptionally good Shorthorn bull in Gibson's Goods, the herd bull. Gibson's Goods is a good individual, but he is notable especially for the excellence of his get. The youngsters which Mr. Gibson showed at the State Fair were mostly sired by him, and were as fine a lot as could be found in many a day's travel. Mr. Gibson takes a just pride in the excellence of the Shorthorns bred on his Roselawn Stock Farm, for he has a herd which, although not large in numbers, is full of quality. We would like to see a herd like this double its size, but the demand for Roselawn Shorthorns is so persistent that Mr. Gibson finds it difficult to hold on to many of his young stock. The distribution of Roselawn stock throughout many herds in the West is a good thing for the purebred cause, however, and in the years to come the Roselawn will appear frequently in the recorded ancestry of the show ring winners.

A GOOD AMENDMENT.

(By A. L. Cowell.)

The first proposition which the voter of Modesto will find on the official ballot at the November election will be Senate constitutional amendment No. 3, to allow the use of irrigation district bonds as security for deposits of public money in banks. It is found in full on pages 5 and 6 of the pamphlet to be distributed to all the voters, which also contains an argument in favor of it. There is no argument against it in the pamphlet, as it was submitted by unanimous vote of both branches of the Legislature at the special session last December.

This amendment was approved by all of the State conventions of the political parties at Sacramento in September, and has met with endorsement by numerous semi-public organizations.

Its purpose is to widen the market for the bonds of irrigation districts, which have been greatly hampered in their work because banks do not like to buy bonds which they cannot use as security when they wish to borrow money from the State or from counties or cities.

It should be noted that the amendment makes no change in the Constitution except to add the bonds of irrigation districts to the list of bonds which may be used to assure the repayment of public funds that may be loaned to banks.

An irrigation district is a public organization, created by vote of the people within a certain area. It has the power to issue bonds for the construction or acquisition of an irrigation system, and the water is owned and controlled by the people of the district. The district has full taxing power to secure the payment of its bonds, and their issuance is safeguarded by a law requiring examination of new projects by a State Commission composed of the Attorney-General, the State Engineer and the Superintendent of Banks.

Eight irrigation districts, comprising about 1,000,000 acres, are now in existence in California, and new ones are contemplated in Siskiyou, Sacramento and Riverside Counties. The adoption of this amendment will give them greater returns for their bonds and help them to develop the State, and, with the safeguards that have been provided by recent legislation, the legislators and others familiar with the subject declare that the bonds of such districts may be safely placed on an equal legal footing with other public bonds.

REGISTRY ASSOCIATIONS WILL HELP.

The American Live Stock Registry Associations are tuning up for a display at San Francisco in 1915 that will be worthy of the \$5,000,000,000 represented by the animals on American farms. The Secretary of one association makes this statement:

"We shall arrange for the largest special prizes ever offered by this association at any exposition."

Another Secretary writes as follows: "Believe our association will be liberal in supplementing your premiums, so you need not be afraid to ask for a large appropriation."

DIGESTIVE DISORDERS OF LAMBS

Disorder of the digestive functions afflicts lambs most severely. White scour affects the unweaned lamb. This appears to be a passing of undigested milk. Change the ewe's feed, providing poorer hay with ground oats and corn, with a sprinkling of linseed meal.

POULTRY DEPARTMENT

The California State Fair Poultry Show

The poultry show at the California State Fair this year was about what we had been led to expect, and while there were many good birds in the show the general quality was low, and the number of birds about half of the number shown last year. This latter fact was really a benefit to the show, as it is about the number which the present poultry building will house comfortably.

The poultry building ought to be at least double its present size, and it is up to the poultrymen of the State to see to it that the need for this building is properly presented when the time comes for the next appropriation for the Agricultural Society. And it would seem that now is the time for poultry raisers to make an effort at least to have a man appointed to the State Board of Agriculture who understands their needs, and who will look to their best interests. There are in California many poultry breeders who are also men of large affairs and well fitted to occupy a place upon the Board. We believe that the State Board of Agriculture, as a body, have done the best they could for the poultry interests, but in the absence of one aggressive, well-posted man to give intelligent representation to the poultrymen, it is only natural that they should be overlooked in appropriations. The other departments of the State Fair this year were an unqualified success. With co-operation on the part of all the poultry organizations in the State, there seems to be no reason why the poultry show could not be made a worthy part of the Fair.

Probably the best all around display in the show this year was that of Marshall Black Farm. Some of the birds were recently brought out from the East, and these, combined with the good ones Mr. Black already had, made a strong showing.

The single big feature of the show was Mr. and Mrs. Sullivan's Buff Orpington hen, Pet McClave. She was widely commented upon in the press throughout the State as "the \$2500 hen," and was the means of attracting many visitors to the poultry building.

Engene P. Sabin of Livermore was on hand with a good string of Barred Rocks, and divided honors with the good exhibits of E. J. Boden of Sacramento and E. A. Pyke of Oroville.

Diablo Poultry Yards showed some very good White Rocks, and divided the ribbons with the Lodi Normal, North Side Gardens and Lodi of San Diego.

The awards follow:

AMERICAN CLASS.

BARRED PLYMOUTH ROCKS.

Exhibitors—E. J. Boden, Sacramento, Cal.; Eugene P. Sabin, Livermore, Cal.; E. A. Pyke, Oroville, Cal.; Alfred D. Robinson, Point Loma, Cal.

Awards.
Cock—1, 2, 3, Boden; 4, Sabin.
Hen—1, Pyke; 2, 3, Boden; 4, Sabin.
Cockerel—1, Boden; 2, Robinson; 3, Sabin; 4, Boden.
Pullet—1, Sabin; 2, 3, 4, Pyke.
Pen—1, Boden; 2, Robinson.

WHITE PLYMOUTH ROCKS.

Exhibitors—H. A. Loud, San Diego, Cal.; Lodi Normal Institute, Lodi, Cal.; North Side Gardens, Sacramento, Cal.; Diablo Poultry Yards, Concord, Cal.; J. Hildreth Crow, Oakland, Cal.

Awards.
Cock—1, Loud; 2, Lodi Normal.
Hen—1, North Side Gardens; 2, Loud; 3, Lodi Normal; 4, Loud.

Cockerel—1, 2, Diablo Poultry Yards.
Pullet—1, 2, Crow; 3, 4, Diablo Poultry Yards.

Pen—1, Diablo Poultry Yards.

PARTRIDGE PLYMOUTH ROCKS.

Exhibitors—H. A. Loud, San Diego, Cal.; Wm. J. Head, West Berkeley, Cal.; W. H. Kelley.

Awards.

Cock—1, Loud.
Hen—1, 2, Loud; 3, Head; 4, Loud.
Pullet—1, 2, Loud.
Pen—1, Kelley.

COLUMBIAN PLYMOUTH ROCKS.

Exhibitors—M. Nic, Pasadena, Cal.; H. A. Loud, San Diego, Cal.

Awards.

Hen—1, 2, Nic.
Cockerel—1, Nic; 2, Loud.
Pullet—1, 2, Nic; 3, 4, Loud.

WHITE WYANDOTTES.

Exhibitors—Marshall Black Farm, Palo Alto, Cal.; W. F. Heusel, Hanford, Cal.; H. S. Miles, San Diego, Cal.

Awards.

Cock—1, 2, Marshall Black Farm; 3, Heusel.
Hen—1, 2, Marshall Black Farm.
Cockerel—1, 2, Marshall Black Farm.
Pullet—1, 2, Marshall Black Farm; 3, Heusel; 4, Mrs. Spaulding.
Hen—1, 2, Marshall Black Farm.

SILVER-LACED WYANDOTTES.

Exhibitors—W. F. Heusel, Hanford, Cal.; E. B. Neilson, Oroville, Cal.; Ben M. Woodhull, Stockton, Cal.

Awards.

Cock—1, 2, Heusel.
Hen—1, Neilson; 2, 3, Heusel.
Cockerel—1, Heusel; 2, Neilson.
Pullet—1, Neilson; 2, 3, Heusel.
Pen—1, Woodhull; 2, 3, Heusel.

GOLDEN-LACED WYANDOTTES.

J. W. Lampsell, National City, Cal., all awards.

COLUMBIAN WYANDOTTES.

Marshall Black Farm, all awards.

BUFF WYANDOTTES.

W. F. Heusel, all awards.

PARTRIDGE WYANDOTTES.

Exhibitors—Robert Mitchell, Los Angeles, Cal.; V. M. Smith, Alameda, Cal.; J. Hildreth Crow, Oakland, Cal.

Awards.

Hen—1, 2, Mitchell; 3, Smith.
Cockerel—1, Crow.
Pullet—1, Crow.

RHODE ISLAND REDS.

Awards.

Pullet—3, Mrs. R. S. Spaulding.
All other awards to Fowler-Masterson, Duarte, Cal.

ASIATIC CLASS.

LIGHT BRAHMAS.

Exhibitors—Mrs. P. W. Nahl, Oakland, Cal.; Mrs. Clifford Du Jardin, San Francisco.

Awards.

Cock—1, Mrs. Nahl; 2, Mrs. Du Jardin.
Hen—1, Mrs. Nahl; 2, Mrs. Du Jardin.
Cockerel—1, Mrs. Nahl.
Pen—1, Mrs. Nahl.

PARTRIDGE COCHIN.

All awards to Wm. H. McKay, Stockton, Cal.

BUFF COCHINS.

All awards to Mrs. Clifford Du Jardin, San Francisco.

BLACK LANGSHAN.

Exhibitors—M. W. Nicholson, Oakland, Cal.; Chas. W. Wilson, Elmhurst, Cal.; C. E. Ross, Oakland, Cal.; R. W. Becks, Los Angeles, Cal.; Geo. A. Janssen, Oakland, Cal.

Awards.

Cock—1, Nicholson; 2, Wilson.
Hen—1, 2, Ross; 3, Wilson; 4, Nicholson.
Cockerel—1, Blakelev.
Pullet—1, Ross; 2, Becks; 3, Ross; 4, Janssen.
Pen—1, Janssen.

WHITE LANGSHAN.

All awards to M. W. Nicholson, Oakland, Cal.

MEDITERRANEAN CLASS.

WHITE LEGHORNS.

Exhibitors—Marshall Black Farm, Palo Alto, Cal.; North Side Gardens, Sacramento, Cal.;

mento, Cal.; O. B. Morris, Lodi, Cal.; W. H. Goss, Hannamonton, Cal.; C. T. Carpenter, Sacramento, Cal.

Awards.

Cock—1, Marshall Black Farm; 2, 3, North Side Gardens.
Hen—1, Marshall Black Farm; 2, Goss; 3, 4, Carpenter.
Cockerel—1, Marshall Black Farm; 2, Morris; 3, Marshall Black Farm; 4, Goss.
Pullet—1, 2, Marshall Black Farm; 3, Goss.

BROWN LEGHORNS.

All awards to Fowler & Masterson.

BLACK MINORCAS.

Exhibitors—J. P. McDonough, Geyserville, Cal.; C. C. Bonnell, Los Angeles, Cal.; W. A. French, Stockton, Cal.

Awards.

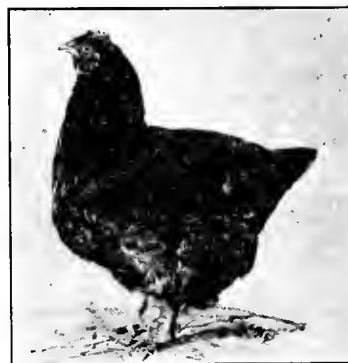
Cock—1, McDonough; 2, Bonnell; 3, French; 4, McDonough.
Hen—1, Mrs. Spaulding; 2, J. Hildreth Crow; 3, Bonnell; 4, McDonough.
Cockerel—1, McDonough; 2, French; 3, McDonough; 4, Bonnell.
Pullet—1, 2, Bonnell; 3, French; 4, McDonough.

WHITE FACE BLACK SPANISH.

All awards to Chas. P. McAlmond.

BLUE ANDALUSIANS.

Cock—1, J. Hildreth Crow.
Cockerel—1, A. O. Hermung; 2, Diablo Poultry Farm; 3, J. Hildreth Crow.



Lady Red, a Wonder in Type and Color Among S. C. R. I. Reds. Owned by Manor Farm, Petaluma, Cal.

ANCONAS.

Exhibitors—Chas. F. Holman, Stockton, Cal.; R. S. Wright, Sacramento, Cal.; Peerless Poultry Yards, Orland, Cal.; Wm. H. McKay, Stockton, Cal.

Awards.

Cock—1, Holman.
Hen—1, Holman.
Cockerel—1, Wright; 2, Peerless Poultry Yards; 3, McKay.
Pullet—1, Peerless Yards; 2, Wright; 3, 4, McKay.

WHITE ORPINGTONS.

Exhibitors—North Side Gardens, Sacramento, Cal.; Mrs. Bertha Hagedorn, Fruitvale, Cal.; Lodi Normal Institute, Lodi, Cal.; Wm. T. Frost, Oakland, Cal.; Raisin Poultry Yards, Fresno, Cal.

Awards.

Cock—3, 4, North Side Gardens.
Hen—1, Mrs. Hagedorn; 2, Lodi Normal; 3, Mrs. Hagedorn; 4, Lodi Normal.
Cockerel—1, 2, Frost; 3, Mrs. Hagedorn.
Pullet—1, 2, Frost; 3, Raisin Poultry Yards; 4, Frost.
Pen—1, 2, Mrs. Hagedorn.

BUFF ORPINGTONS.

1, 2, Pullet to J. W. Lampsell, National City, Cal. All other awards to Mr. and Mrs. W. S. Sullivan, Agnew, Cal.

BLACK ORPINGTONS.

All awards to Marshall Black Farm, Palo Alto, Cal.

SILVER HAMBURGS.

All awards to M. A. Hill, Hanford, Cal.

SPECIALS.

American class—Best male, White Wyandotte cock, owned by Senator Marshall

Black of Palo Alto; best female, White Wyandotte pullet, owned by Senator Marshall Black of Palo Alto.

Asiatic class—Best male, Buff Cochins cock, owned by Mrs. Clifford Du Jardin, San Francisco; best female, Black Langshan pullet, owned by C. E. Ross, Oakland.

Mediterranean class—Best male, Blue Andalusian cock, owned by J. Hildreth Crow of Oakland; best female, White Leghorn pullet, owned by Marshall Black of Palo Alto.

English class—Best male, White Orpington cock, owned by William T. Frost, Oakland; best female, White Orpington hen, owned by Mrs. Bertha Hagedorn, Fruitvale.

Best bantam—Male, B. B. Red Game cockerel, owned by Arthur Dixon, Fresno; best bantam female, Black Cochins hen, owned by Fred A. Arnold, Stockton.

Best ornamental male bantam—Silver Seabright cockerel, owned by William A. French, Stockton; best female, Black Cochins hen, owned by Fred A. Arnold, Stockton.

Best male game bantam—B. B. Red Game cockerel, owned by Arthur Dixon, Fresno; best female, B. B. Game hen, owned by Fowler & Masterson, Duarte.

Best male duck—White Pekin duck (old drake), owned by W. F. Heusel, Hanford; best female, Aylesbury (young duck) owned by Mrs. Hugh McGowan, Watsonville.

Best male goose—Toulouse (old gander), owned by Mrs. Hugh McGowan, Watsonville; best female, Toulouse (old goose), owned by Mrs. McGowan, Watsonville.

Best male turkey—Old Tom Bourbon Red, owned by Mrs. B. Hocking, Guasti; best female, old hen Bourbon Red, Mrs. B. Hocking.

Pigeons—Best cock bird in show, Old Black African Owl, owned by E. L. Teague, Oakland; best female, White Maltese hen, Dr. G. Kleeman, Oakland.

WATER FOWL.

FAWN AND WHITE INDIAN RUNNER DUCKS.

Exhibitors—Lodi Normal Institute, Lodi, Cal.; W. F. Heusel, Hanford, Cal.

Awards.

Old drake—1, Walters; 2, 3, Heusel.
Old duck—1, Walters; 2, 3, Lodi Normal.
Young duck—1, 2, Walters.
Young drake—1, 3, Lodi Normal; 2, 4, Heusel.

WHITE INDIAN RUNNERS.

Old Drake—1, 2, Mrs. Lingo; 3, Caldwell Brothers; 4, Lodi Normal.
Old duck—1, 2, Mrs. Lingo; 3, Lodi Normal.
Young drake—1, Caldwell Brothers; 4, Mrs. Lingo.
Young duck—1, Mrs. Lingo; 3, Lodi Normal.
Old pen—1, Mrs. Lingo.
Young pen—1, Mrs. Lingo.

FAWN INDIAN RUNNERS.

Old drake—2, Mrs. Lingo.
Old duck—4, Mrs. Lingo.
Young drake—2, Mrs. Ward.
Young duck—1, 3, Mrs. Ward; 2, Mrs. Lingo.

AYLESBURY DUCKS.

Young drake—1, 2, Mrs. McGowan; 3, Goodacre Brothers.
Young Duck—1, 2, Mrs. McGowan.

PEKIN DUCKS.

Old drake—1, Heusel.
Old duck—1, Heusel.
Young drake—1, 3, Holman; 2, Heusel.
Young duck—1, 2, Heusel; 3, 4, Holman.

Don't overlook the San Joaquin Poultry Association show at Stockton, Cal., November 13th to 17th. Those of our readers who have shown there will hardly need a reminder as they look forward to this show above all others in this section of the State. For the benefit of those who have never shown at Stockton, we will say that there is one of the best managements on the coast in charge of this show, the season at which the show is held is right, and a showing in Stockton this year will make you a friend of the San Joaquin show in following seasons.

Questions and Answers

BY THE POULTRY SPECIALIST.

A valuable and instructive feature of our Poultry Department is "Questions and Answers." Any of our subscribers desiring advice or information upon any matter pertaining to poultry raising will please address Poultry Editor, The Live Stock and Dairy Journal, Sacramento, Cal., and answers will be printed in this department.

Poultry Editor The Live Stock and Dairy Journal—Can you tell me what is the matter with my month old turkeys? Four died in one day. The roof of the mouth and under the tongue was red and inflamed, and particles of food seem to have collected under the tongue. They seem to have difficulty in swallowing, as if the throats are sore. Half of the flock is lame. I feed cracked corn, wet corn meal, plenty of lettuce and chopped fresh onion, and occasionally a hard boiled egg. Both turkey hens and gobbler are last year's products.—Mrs. J. W. S., Willcox, Ariz.

The turkeys, no doubt, have canker, and if it is not checked it will continue to grow worse, filling the throat and windpipe, causing death. Mix thoroughly 10 grains permanganate of potassium with half ounce powdered acacia gum. Cover all patches of canker with this and repeat three times daily until canker is removed. I have also had good success with dry sulphur, giving half a teaspoonful in the mouth and throat, also mixing sulphur in the mash. First giving Epsom salts to act on the bowels will, in either case, insure more effective cure.

As to feed, a mash composed of bran 2 parts, middlings 1 part, corn meal 1 part, with charcoal and salt added. Wheat is better than corn for your turkeys.

Poultry Editor The Live Stock and Dairy Journal—Will you please tell me how often and when I should pick feathers from my geese? Also one of my geese won't eat, and seems to have some slimy water running from its beak at times. I feed them plenty of grain, with a little mash of bran at times. Please tell me what to do.—S. W. C., Benicia, Cal.

Geese may be plucked for the live feathers in July and December, but not on the back. Only the small feathers under the wings, on the sides and partly under the belly. If they are picked too freely they will not do well the following laying season.

The sick goose has indigestion with wrong feeding. You must not feed so much grain, and you must give plenty of grit or coarse sand. Give more mashes with plenty of green stuff, and do not forget to mix a little grit in the mashes every time. Geese will do well on green stuff and plenty of water, if they can supply themselves with grit or sand.

Poultry Editor The Live Stock and Dairy Journal—Some of my young hares have slobbers. Please tell me the remedy.—A. Z. C., Eureka, Cal.

It is a disease caused by lack of nourishment from the mother hare, and thus being compelled to eat hay and other feed intended for older stock; but it can be cured by rubbing a pinch of salt around the wet jaws, then keeping all food from them for a day, after which they should have only milk from the mother.

Poultry Editor The Live Stock and Dairy Journal—I have a cat which often acts queerly. She will run sud-

denly in a corner and race around the room as if crazy, then all at once she will become calm. She is well fed, as she gets some meat almost every day. Please help me out in this if you can, and I will be greatly obliged. Yours sincerely.—A. J. L., Dos Palos, Cal.

You have been feeding wrong—too much meat—for cats do better on milk and bread, so if you will leave out all meat for the present she will soon become normal, and the fits will leave her.

Poultry Editor The Live Stock and Dairy Journal—Please tell me how often I should feed baby chicks, and what the feed should be.—A. C. C., San Diego, Cal.

No feed to baby chicks for the first forty-eight hours or so, except some fine grit and clean water; then some small chick feed of fine grains, such as you get from the supply stores, which should be given in small quantities every two or three hours, and if in fine litter so much the better, but only a scattering of finely cut straw for them to scratch in is required. As they get older the litter may be deeper, and when a week old some dry mash of half bran, a quarter shorts, a quarter feed meal, a trifle fine charcoal, a little blood meal, all mixed and placed in a low box where they may help themselves.

Poultry Editor The Live Stock and Dairy Journal—Will you please tell me why green stuff is necessary for poultry?—W. M. N., Whittier, Cal.

To keep in good health all horses, cattle and poultry require what is called "roughage"—hay or green stuff, such as alfalfa, clover, etc., for horses and cattle, and green grass, alfalfa, clover, lettuce, etc., for poultry, for if the latter are given hay it would impact in their crop, and they would not eat much of it, while green stuff contains a good per cent of water, which is required in eggs. Green stuff assimilates easily in the crops of poultry, but what is more important, it keeps them in good health, for no hen will lay often if in poor health no matter how many eggs she is capable of laying during the year.

Poultry Editor The Live Stock and Dairy Journal—One of my big hens has a corn on the under side of her foot. Is it dangerous, and how can it be cured? Thanking you in advance. Yours truly.—H. E. H., Santa Maria, Cal.

The hen has humble foot, caused by jumping on a hard spot, or from too great a height. It may become dangerous, as I have seen a hen die from such a complaint, which caused inflammation in the foot and she gradually got worse. To cure, slit open the swelling with a sharp knife. If there is pus in the foot, then apply peroxide of hydrogen till it stops foaming. Paint the swelling with tincture of iodine outside the cut place, and wrap a clean rag around the foot so it will stay. Repeat the application of iodine every second day.



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If you want the best in California, in Stock and Eggs, ultimately you will have to come to me.

Cockerels\$5.00 to \$25.00
Hens3.50 to 5.00
Pullets3.00 to 10.00
Eggs.....\$4.50 and \$10.00 per 15

A. L. JENKINS,

Sebastopol, California.

Chinese Ringneck Pheasants

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CASTRO HILL GAME FARM

WHITE AFRICAN GUINEAS.

PHEASANTS—Chinese Ring-Neck and Golden.

ORPINGTONS—Buff, White and Black.

COCHIN BANTAMS—White and Buff.

Visitors Welcome.

Phone: Farmers 240.

MELLETT & CO., R. 3, Box 33, Hayward, Cal.

ROUP

Contagious Catarrh, Swelled-Head, Chicken-Pox, Diphtheria and similar contagious diseases of chickens, including Black-Head of turkeys, can be easily cured by using **DR. WHEELER'S SPECIFIC No. 1** in the drinking water, and it is sold by

J. E. HOLT, Sunland, Cal.

for \$1, and 5 cents postage, with expert advice free. Scores of unsolicited testimonials.

Also best remedy, "RAISALL," for White Diarrhoea and Cholera of chicks at same price.

THE MANOR FARM

C. S. WAKEFIELD, Prop
PETALUMA, CAL.

RHODE ISLAND REDS

Unexcelled in type and color. Egg producers. We started our showing season this year at Santa Cruz and took 21 prizes. Eight specials on color and type, male and female.

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S. C. BLACK MINORCAS.

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Eggs, Chicks, Stock, Pens and Trios a Specialty.

Now Ready—S. C. White Leghorn Pullets From Heavy Layers.

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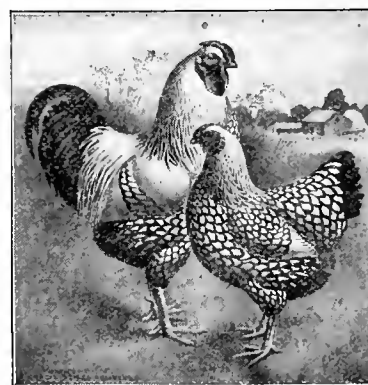
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(Exclusively)

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THE GREAT WINTER LAYERS.

Silver-Laced Wyandottes are holding their own in all three of the big contests now being held in the United States. In all of these contests they are holding second place. In the Missouri egg laying contest they have 309 eggs to their credit against 310 eggs for the first five months of the contest.

Eggs \$2.00 and \$3.00 per setting of 15. I guarantee a good hatch or replace the setting.

Poultry Breeders' Directory

Under this heading, for a nominal charge, payable in advance, we will insert names and addresses of breeders of various varieties of poultry. This is done for the convenience of owners of flocks who wish to keep their names before the public the year round. Display advertising is undoubtedly the big business getter of today, but no doubt there are many breeders who are not justified in carrying a display ad during the entire year. To such breeders the economy and convenience of this column is readily apparent.

S. C. WHITE LEGHORNS.

M. Duttbernd.....Petaluma, Cal.
C. B. Carrington.....Hayward, Cal.
J. H. Meyer.....R. 3, Modesto, Cal.

RHODE ISLAND REDS.

Jack Lee.....R. 3, box 58, Petaluma, Cal.
Manor Farm.....Petaluma, Cal.

BARRED PLYMOUTH ROCKS.

F. W. Hardman.....Volta, Cal.
L. N. Cobbledick & Co.....Oakland, Cal.

BUFF ORPINGTONS.

C. E. Futrell.....Vialla, Cal.

WHITE ORPINGTONS.

Mrs. O. S. Moore, R. 1, Bx. 49, Modesto.

WHITE WYANDOTTES.

M. A. Pilgrim.....Chico, Cal.
A. L. Jenkins.....Sebastopol, Cal.

BUFF LEGHORNS.

P. Ella.....R. 3, Modesto, Cal.

ANCONAS.

O. E. Palmer.....Dinuba, Cal.

BLACK MINORCAS.

J. P. McDonough.....Geyserville, Cal.

WHITE MINORCAS.

L. N. Cobbledick & Co.....Oakland, Cal.

BUFF MINORCAS.

Mrs. I. H. Tuttle.....Watsonville, Cal.

S. C. RHODE ISLAND REDS.

Mrs. M. A. Saylor.....Orland, Cal.
B. H. Brubaker.....Corning, Cal.

S. C. White Leghorns

Our birds won every first, second and two third prizes and three specials at the Petaluma Poultry Show, 1911. Circular Free.

M. DUTTBERND,

R. 1, Box 92-3, Petaluma, Cal.

VILLA MARIA

DUX! DUX!

Standard-Bred.

Buff Orpington, White Indian Runner and Fawn and White Indian Runner Ducks.

CHARLES V. PARKER,

P. O. Box 124, Hanford, Cal.

POULTRY SHOW AT THE STATE FAIR

The Live Stock and Dairy Journal—In past years conditions have been so bad at the State Fair show that there was hardly anything that could be classed as good. From several quarters the bad has been pointed out and commented upon in the most severe terms, and this may have had a good effect, but in any case there has been great improvement. The old soap box coops, the odors from the water fowl and the unsightly way of cooping have all passed away, and cleanliness, new coops and uniformity of cooping was the rule of the 1912 show. In fact, the show of this year was better than any previous show.

True, the number of fowls shown was less than for any year during the last few years—737 chickens, 95 ducks, 276 pigeons, 4 geese, 5 turkeys; total, 927 birds. However, the quality was extraordinary in most cases, but there were still some of the worst scrubs I have ever seen. Most breeds were well represented, but in some the falling off was very noticeable. The Rhode Island Red breeders were especially conspicuous by their absence, only 11 singles and two pens entered, against 150 to 160 birds in previous years. Most of the big breeders of White Leghorns were also absent.

The lack of a new building, so much discussed last year, perhaps kept them away, and, in my opinion, it has done more good than harm, for there was no room for more birds to be cooped. Around the ends and sides all coops were double decked, with twelve rows of coops up the middle of the building. The space in the aisles was about four feet wide, which was none too much.

Anyone can imagine the conditions last year, when there were 1600 birds, feed supply exhibits and all the water fowl inside the building.

Conditions have changed, but have they changed sufficiently to accommodate the quantity of birds that would be sent if we had a large building? I unhesitatingly say "No," and until conditions are changed it will be impossible for the fanciers of the State to show their birds in the numbers that could be shown under suitable conditions.

I submit a list of names of true fanciers who were absent, with a rough estimate of the numbers of birds they could send, if at any time they should decide to do so:

M. Bassett, 25; B. F. Bradley, 25; J. L. Meadows, 25; Lindgren Brothers, 25; E. Gallup, 25; W. W. Hirsch, 150; W. E. Gibson, 25; W. H. Ingram, 50; W. H. Bissell, 50; Vincent Smith, 25; Emma Reid, 25; Mr. Popperwell, 25; Jack Lee, 25; M. Duttbernd, 25; A. L. Jenkins, 25; Mrs. Tuttle, 15; L. N. Cobbledick, 25; Wm. Kessler, 20; F. M. Hoyt, 25; E. R. Everett, 25; Southern California, 250; Hopland Stock Farm, 50; E. E. Miller, 12; Wm. Keenedy, 20. Making a total of 1002.

If these birds were exhibited can any one imagine what would happen in the cramped quarters? Who could be blamed for this? The Superintendent would get the blame, and he in turn could only tell the Directors that he had done the best he could under the circumstances, and with the accommodations available. The writer has gone thoroughly into the matter of getting a new building, and has come to the following conclusions: First, that the Directors of the State Agricultural Society are not to blame, as their hands are tied as much as anyone's in trying to get money from the State. Second, that the Superintendent of the show can only pull up his department as far as the Directors have decided. Third, the blame can therefore be laid only at the door of the fancier himself.

If he will do nothing to help the movement for a new building for the poultry show at the State Fair, it will remain as it is today.

A movement will be started immediately after the Fair closes to get the co-operation of every fancier in the State. The principal leader in this will be introduced later, and I hope that everyone will give his support to him in this movement, as there is no selfish motive in this—simply his wish to see things improve generally for the best interests of the fancier and the State of California.

JACK LEE.

Petaluma, Cal.

SPECIALIZATION.

Energy of different quality, value and power is given out every day by each individual, some people bestowing all the energy they possess on many things, others giving little of it in a haphazard way, while a few give all their concentration and power to one article or subject, and these last are the people who give the quality, get the value and make their efforts of financial import to themselves and those they come in contact with, for they are the specialists.

It matters not what the subject is—law, finance, trade or poultry raising—the man or woman who devotes their full attention and work to one article, and more particularly to one kind or line of that particular work, will do far better in the end than by dividing their attention and care to several lines.

Too many people have different breeds of chickens to which their attention and care must be divided, with the result that they get very indifferent or poor stock, and often mixed breeds of no particular value, but if they devoted their energies to just one breed they would have finer stock, and the value would be much higher. Take, for instance, the man or woman who tries to supply market eggs, little chickens, hatching eggs and breeders. They would do much better to confine themselves to little chickens or to broilers, and for the latter if they kept strictly to one breed, say the Barred Plymouth Rocks, the work would be easier, the birds finer and the financial results would show better, while the customers would be well satisfied with the plump, tender birds.

By specializing on a single breed for a single purpose, more birds can be kept together in one lot, there is no cross-breeding, no mixed birds, less care and thought to be given to the feeding, the owner gets his name and business more completely before the customers and public, many of whom are willing to pay better prices for the stock when found good, the system gives more tone and appearance to the place of business, and it takes but

a few years for the man to become a specialist in that breed if he is progressive.

When a glance is given to many of the yards where many breeds are kept it is apparent to a thoughtful observer that the mongrels, mixed breeds and weary willies of poultry to be seen there are really the bad results of dividing attention, having too many irons in the fire, or carelessness, and the surprise is that any money is made on the flock, where by the same or less amount of work a single breed would show a world of difference.

If running eyes or watery nostrils appear they are a bad sign for other serious trouble, and the ailing ones must be separated and medicated at once.

Clean water is a necessity daily, and the founts washed out each time, with green stuff, grit and shell, as they are the primaries of health.

October is a good month to hatch out, which will give you some broilers and fryers when prices are high, and the pullets will come in useful for egg producing next spring.

Look to Your Poultry

Laying hens are the most profitable part of your stock on the farm at this season of the year. They will pay a handsome return on the investment in food and care which you make for them.

Coulson's Egg Food

Should be given to your flock. It contains the essentials of egg production, and will put your hens in the best of condition for a good supply of eggs at a time when eggs bring a good price.

Get our booklet, Poultry Feeding for Profit. You will find it interesting and instructive. Mailed Free. Write for it today.

Our food is for sale by all reliable poultry supply houses. Insist on getting Coulson's if you want the best.

COULSON POULTRY AND STOCK FOOD COMPANY
PETALUMA, CAL.

BRED FOR EGGS AND MEAT
Bellevue strain of White and Columbian Wyandottes, S. C. White Leghorns and Light Brahmas. Stock for sale. Over thirty years in business.
MICHAEL K. BOYER,
Box L,
Hammon, Atlantic County, N. J.

A SHOW YOU CAN'T AFFORD TO MISS

3rd Annual Poultry and Pigeon Show

—of the—

San Joaquin Poultry Association

At Stockton, California, November 13 to 17

LIBERAL PRIZES.

LARGE ARRAY OF TROPHIES.

JUDGES.

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STOCKTON, CAL.

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EGGS, CHICKS, STOCK—Any quantity. Rhode Island Reds (both combs), Japanese Silkies, S. C. White Leghorns. More prizes won on Reds than any two competitors (Hirsh barred) on the coast in 18 months; 168 prizes, 12 silver cups. Week's feed given with every 100 chicks. Eggs from prize winning pens, \$7.50 and \$5 per setting. Utility, \$1.50 per setting. Chicks \$15.00 per hundred. Write for circular. Jack Lee, R. 3, Box 58, Petaluma, Cal.

FOR SALE—Choice Barred Plymouth Rock cockerels (Hawkins Royal Blue strain), now ready for mating. Also Barred Rock and White Leghorn chicks. Enoch Crewe, Santa Cruz, Cal.

BARRED PLYMOUTH ROCKS—New York, Topeka and Kansas City Winners. Eggs for hatching from twenty grand yards. Choice stock for sale. Sixteen years breeding Barred Rocks exclusively. Charles H. Vadden, Box 396, Los Gatos, Cal.

BLUE ANDALUSIANS of the strain of the VISALIA POULTRY CO. are winners of all the blue ribbons and cups wherever entered. Eggs only this season. First pen headed by the famous "Bamboo" Standard of Perfection. Visalia, Cal.

"RINGLET" BARRED ROCKS—Eggs from choice matings, \$2.50 and \$3.00 per setting. Satisfactory hatch guaranteed. Stock for sale. Write for prices. J. H. Gunn, Healdsburg, Cal.

TWELVE CHOICE ROSE-COMB WHITE LEGHORNS—A few chicks, a bargain. Eggs of above. Also Jubilee Orpingtons, prize birds. E. J. Hall, 507 Mission St., San Francisco.

PRIZE HOUDANS—Catalogue now ready. Mrs. Emma F. Reid, R. F. D. 4, Box 54, San Jose, Cal. Life member American Poultry Association.

BELL STRAIN WHITE ORPINGTONS—A few choice cockerels, 3 months old, for sale. Inquire Pagehurst Poultry and Stock Farm, Orland, Cal.

CHICKS! CHICKS! CHICKS! 10c UP—We ship everywhere. Send today for 66-page catalog, illustrated. PULLETS 2, 3, 4, 5 and 6 months of age. Fine White Leghorns 10 to 12 months of age, \$9 per dozen. Write us your wants today. The Pioneer Hatchery Co., 112 E. Eighth Street, Los Angeles, Cal.

LIVE STOCK.

O. I. C. PUREBRED REGISTERED HOGS—Young stock, both sexes. Write for prices. Pedigrees guaranteed. Bet foundation stock in State. J. W. Bennett, R. 2, Modesto, Cal.

SWINE FOR SALE—I can provide you with Poland China, O. I. C. Hampshire and Berkshire young stock of both sexes. Purebreds. Prices right. Jas. Willmann, R. 4, Modesto, Cal.

WHEN YOU DESIRE SWINE, remember that I am a breeder of purebred O. I. C., and can supply you with young sows and boars out of famous dams and by prize winning sires. Best Eastern and California blood. Write for prices and pedigrees. Can give immediate delivery. R. A. East, R. 2, Modesto, Cal.

I have a few purebred Holstein bull calves out of my best registered cows for sale. These young males are choice-bred. Have many registered cows coming in this fall. Write now and engage their offspring. For prices and pedigrees write B. F. Anderson, Modesto, Cal.

REGISTERED JERSEY BULL FOR SALE—Or will trade for heifer. He carries the blood of two world's champions. Dropped November 6, 1911. F. E. Thayer, Live Oak, Cal.

O. I. C. HOGS—I breed purebreds only. All registered, and papers go with all sales. Sire, Creamery Sport, whose sire is Martin Sport; dam, Pansy Blossom. Have six 1-year-old sows for sale. Also young stock coming along. Write me to reserve your orders for young stock of both sexes. M. A. McLean, Route 5, Modesto, Cal.

What Have You to Sell or Exchange?

No matter where you live in California, Arizona, New Mexico, Utah, Nevada, Idaho or Oregon, the Classified Advertisements in the JOURNAL are read by your neighbors. Perhaps some one within ten miles of your home wants to buy just what you want to sell, and would buy from you if he knew what you have. Tell him what you have through this classified page.

NEVADA BRED BERKSHIRES—Bred to breed and to win. Masterpiece and Master Lee, sires. Rugged, pasture-fed pigs. Come and see them, or write. L. B. Patrick, Box 287, Reno, Nev.

PUREBRED DUROC-JERSEY BOAR for sale—Fifteen months old. Bargain. Inquire Pagehurst Stock Farm, Orland, Cal.

FOR SALE—Registered service Jersey bulls and bull calves from prize winners and big producers. Unregistered Jersey bull calves at \$25 each from registered sires and choice Jersey cows. Dairyman's opportunity. Seventy acres choicest Mokelumne River Bottom Land; will produce five crops alfalfa without irrigation; improvements, two large stock barns, skimming station, house, sheds, Bartlett pear orchard.

Gaited saddle, driving and business horses. A licensed imported German coach stallion, N. H. Locke Co., Lockeford, Cal.

FOUR PUREBRED HOLSTEIN BULLS FOR SALE—All registered and papers go with sale. These fine individuals were raised by the well known breeder, C. T. Brown of Porterville. Pedigrees and ages follow: Capt. Zampa Ormsby (92136), 16 months, sire Silentshade Cantate (57771), dam Lady May Ormsby (147168). I have also a 2-year-old, Hartog Ormsby, sire Sir Skylark Ormsby Hengerveld (39138), dam Leda Hartog De Kol (135401), and two 16-month-old fine young sires by Silentshade Cantate. For quick sale, \$100 to \$150, according to age and pedigree. Write or call on J. A. Polhard, Modesto, Cal. Ranch one mile from town.

JERSEY BULL CALVES FOR SALE. By such sires as Mona's Topper and Oxford Victory and others, by famous sires and out of real cows. Write or call. Weaver Stock Farm, Brawley, Imperial Co., Cal.

HOLSTEIN BULLS FOR SALE—Purebred, registered, fine young fellows. For years and years I have given attention to building up a herd of Holsteins. It has been my life work. Have a son of Princess Ziska, also a son of Lady Bountiful Faskie, sired by Modesto Boy. Also yearling by Constance Sir De Kol M A McLean Route 5 Modesto Cal

ALFALFA SEED.

ALFALFA SEED FOR SALE—Crop 1912. Absolutely free from noxious seeds. Address, V. A. Peterson, Blacks, Cal.

FARM LANDS.

LARGE AND SMALL FARMS, grain and dairy ranches for sale in Modesto and Turlock irrigation districts. Terms and prices on application. Stanislaus Real Estate Company, Modesto, Cal.

BEAUTIFUL ORCHARD HOME—10 acres orchard in Orangevale, Sacramento County, California, planted to 900 almond trees (paper and softshell), 2500 grape vines (Emperors, Bl. Moroccos, Tokays, Missions), all in full bearing; also figs, prunes, apples, pears, oranges, persimmons, Chinese dates, etc., etc. A 1½ story, 5 room house, bath and pantry, hard finished inside, large basement; windmill and tank; water piped through house and for irrigation; stables, packing sheds, chicken houses, sulphur house, 2 fine horses, wagons, implements, tools; complete in all details. This place has to be investigated to appreciate what a bargain it is; annual income over 25 per cent on investment. New electric R. R. station ½ mile. Price only \$5250.

Address: Owner, Box 1, care The Live Stock and Dairy Journal, Sacramento, California.

ALFALFA LANDS.

42 ACRES AT \$150 PER ACRE—Located close to town on the main line of the So. Pac. R. R. and fronting the State highway. Work on highway just contracted for. Good alfalfa and fruit land. If you want the best, then write at once to P. O. Box 198, San Francisco, Cal.

DIXON DAIRY FARMS

20-acre tracts of rich, level ALFALFA LAND at Dixon. All rich, level, sediment land. Close to town. Worlds of water available for pump irrigation. School across the road. Price range, from \$125 per acre and up. Easy terms on all of this tract. Only a few left. Write for further information.

All kinds of improved and unimproved lands for sale, suitable for dairying and alfalfa.

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THE MODESTO CREAMERY INVITES HOMESEEKERS AND DAIRYMEN of California to visit a thriving community, where water is King, due to the best irrigation system in the West. Alfalfa flourishes in Stanislaus County and Modesto and its surroundings boasts of more purebred dairy stock breeders than any other city in California. Modesto Creamery has its own ice plant, which is second to none in the San Joaquin Valley. Lowell Gum, Manager Modesto Creamery, Modesto, Cal.

DAIRY RANCHES.

I am in position to sell you land, improved or unimproved, in the far-famed county of Stanislaus, the first in butterfat production in California. Modesto, the county seat, has many fine dairies. I have a great many listed to sell. Irrigation is a success here and water is King. No saloons in Modesto-Turlock Irrigation District. Write me. Lon J. Coffee, Modesto, Cal.

FOR SALE For \$12,000—96-acre dairy ranch 5 miles west of Laton, Fresno County, Cal. New 4-room house and barn; water for irrigation 62½ cents per acre; also pumping plant from lakes. Terms, one-fourth cash, balance on time.

Also have for sale 100 tons grain and alfalfa hay at market prices; 8 head work stock; farming implements; 9 dairy cows; 1 registered Holstein bull; 20 head of calves 6 to 12 months old; new De Laval separator, and cows and hogs at bargain prices. Dr. D. J. Prather, Modesto, Cal.

A FINE 259-ACRE DAIRY AND STOCK FARM—Well equipped, with eighty acres of alfalfa, well irrigated from ditch and electric pumping plant. Situated in Western Sacramento Valley. With or without stock. Rare chance for person looking for something good. Description and price upon application. Address Box 7, care Live Stock and Dairy Journal, Sacramento, Cal.

POSITION WANTED—A graduate of the Agricultural College of California, age 25 years, desires position on hog or dairy ranch. Will work for an interest in the business. Can furnish best of character references. Address, E. S. W., 138 Ridgeway, Oakland, Cal.

FOR SALE OR EXCHANGE.

FOR SALE OR WILL EXCHANGE for dairy or farm land anywhere in the Northwest, one lot 150x103, with modern six-room cottage, shade and fruit trees, currant and gooseberry bushes, lawn, barn, chicken house, chicken wire corral. Room for two or three cows and horses. Good water right and garden. Good sale for milk, garden and chicken products. Good schools and churches. This good home is located in Gardnerville, Carson Valley, Nevada. For further particulars address: Owner, Box 5, care The Live Stock and Dairy Journal, Sacramento, Cal.

FORCIBLE PARAGRAPHS.

The owner is the one who should manage. The hens are the cogs in the wheel of finance.

Variety is the spice of life, and in feeding hens it is the accumulation of eggs and consequent laying of them.

It is the management, not the climate, which has effect on the health of poultry.

Prevention is far better than cure, but disease can certainly be cured if the vitality is not too low, and the right remedy used.

Fat producing feeds are good and fine for the table hens, but the same proportions will make the layers look like thirteen cents.

The best layers can quickly be picked out by the man or woman who knows, but the novice thinks any 50-cent hen is good enough, and so it is, for the price.

One article alone will not produce large and frequent eggs, but variety of the right kind will.

It is not the surplus of feed which makes the layers too fat, but wrong materials or improper proportions which stop egg production.

Feeding ducks grain is easy for the caretaker, but hard on the pocket-book of the owner, by the non-production of eggs.

If grit or coarse sand is not supplied the ducks, your troubles will accumulate so quickly that remedies will be of no avail.

OCTOBER NECESSITIES.

See that all cracks and leaks on the sides or roofs of the poultry houses are repaired before the rain comes. It may save you lots of trouble later.

If you have some late molters you will be helping them to get through quicker by feeding the rich rations, and all they will eat.

If some of the molting hens or roosters show short, stubby feathers, they need a dip in a strong germicide, and it should be thoroughly done to soak all feathers except the head.

The simplest germicide for the purpose is 10 cents of good tobacco boiled half an hour in a gallon of water, then when blood warm to dip the hens some warm morning.

FORMULA FOR WHITEWASH.

Take a half bushel of unslaked lime, slake it with boiling water, cover it during the process to keep in steam, strain the liquor through a fine sieve and add to it a peck of salt, previously dissolved in warm water, three plums of ground rice boiled to a thin paste and stirred in while hot. Add five gallons of hot water to the mixture, stir well and let stand a few days, covered as nearly air-tight as possible. It can be colored by adding ochre, lamp black, ground keel or bluing to suit.

SUGGESTIONS FOR THE STATE FAIR SHOW

Poultry Editor *The Live Stock and Dairy Journal*—I wish to state some facts which I think will be of benefit both to the Directors of the Fair and to exhibitors.

I think everyone will agree that the show just held containing upward of 1000 birds, some of which were of the highest quality of any I have handled during my six years of setting up the exhibits for the society, was a success.

The attention shown by the Directors in charge was perfect, and I positively know that the same attention is given at the next two shows the State Fair show can be brought up to a much larger show. But here comes the rub. What could we do with such a number?

It means either doubling the coops or crowding the birds, either of which would afford a just cause for complaint.

I will suggest what I think will be a remedy for the condition, which is a new building to be attached to the north side of the present building, or a lean-to built on the same side, and by placing the water fowl and pigeons in this building it would increase the cooping capacity of the main building by 650 birds.

I notice the building has ten large windows in the roof, which, if they could be constructed so that they could be raised, and a door cut through the north side of the building to serve as an entrance to the addition, I think the building could then be kept cool.

As to judging I advised and still believe that an Eastern judge, who is endorsed by American Poultry Association settles the question of judging at the State Fair show. Being on the inside of poultry matters a little, I think better satisfaction can be obtained all around with such a judge. I watched the same carefully this year, and think the judging was satisfactory.

A great many poultrymen could benefit themselves and the poultry business if they would become members of American Poultry Association and buy a copy of the Standard before exhibiting. Under a licensed judge they could protect themselves if they did so.

I made an effort this year to bring out the northern breeder, who, for some reason or other, has never exhibited before, and for those who did come I believe it was proven that the northern part of the State has a fair class of birds, and that it pays.

Was more than pleased that we had a show not filled up with "stringers"—those who buy and sell over—but by breeders who by their skill raise their own birds to perfection.

Now, I think we as poultrymen are entitled to more of a premium or less of an entrance fee, or at least be put more in proportion with the breeders of other classes of live exhibits, as I think the general public is pleased and entertained as much by the poultry show as by any single department conducted by the Fair.

I would be perfectly willing to criticize any failure we had this year, but am unable to find any complaint of this year's show, of any serious importance, and trust that future shows will be conducted along the same lines.
LEONARD W. ESKRIDGE.

HATCHING EARLY.

October is a fine month to place eggs in the incubator or under the hen, though some people are doubtful about doing so, thinking it too early.

If the days are comparatively cool the earlier hatching is commenced the better for the growth and vitality of the chicks, for cool weather is conducive to quicker growth and better feathering, especially if the layers are through the molt, while hot days are

enervating, devitalizing and productive of troubles which prevent full value in growth being attained for the care and management given, and not least is the growth of tender green stuff which adds to nature's requirements for young chicks or other poultry.

Commencing with October there is less trouble with the incubator, better surety for a good hatch. If the caretaker does his part, and less liability for mites to appear if the setting hen is used, though the caretaker should be able to combat those pests any time of the year, and if eggs are placed in early part of that month the chicks would be latter part of it in hatching or first week in November, so the pullets would be producers in April or May at latest, except in Minorcas and a few other breeds which take a few weeks longer in becoming layers, so the probabilities are good for a summer and early fall production in eggs when the older stock is in full molt.

In order to have them become so it is requisite for the caretaker to see they get good management, plenty of right feed, green stuff, cleanliness at all times and good housing, and on the question of feed the writer has found many people have insufficient knowledge or are careless in giving the right materials, the proper per cent of each article, or in the way of feeding, any one of which will cause a brood of fine stock to quickly appear like thirteen cents.

The principal things in raising baby chicks are right warmth and cleanliness, for if they get chilled there is little hope to bring them to maturity in reasonable time if at all, but the great chicken killer, White Diarrhoea, is likely to attack them, then the hopes for growth, with a full per cent of hatched chicks brought to maturity, are gone, and with them many lives of the little ones pass away in a lingering, miserable death, but if they can be brought safely past the first three or four weeks the probabilities for maturity are increased tenfold, and in this respect they are similar to children, for life insurance statistics show the per cent of babies which die during the first year or so is much greater than in the succeeding years, while the number of baby chicks which die yearly in this country alone are many millions.

While it is an absolute fact that the best thing for disease is prevention, diseases even of that nature can be cured if taken in time, though whether to keep health or cure disease there is one thing necessary all the time, and that is cleanliness, which means freedom from mites and lice by frequent cleaning out and spraying with a strong disinfectant.

In feeding, nothing should be given for the first forty-eight hours, or even a little longer, except fine grit and water, then the first feed should be a little dry chick feed at intervals of every two or three hours for the first few days.

When the little ones will eat green stuff it should be given cut very short, and must be tender, for which clover is excellent, or tender alfalfa, and that time will be in a few days after the first feed. At this time some bran with a little shorts, feedmeal and a trifle of bone meal, fish meat meal and charcoal, all mixed together and placed in a low, flat box or hopper, where they can easily get to it, will bring them along just the finest, for they will quickly learn how to eat it, and will want it all the time, but it should be taken away for about three hours in the afternoon so they can eat some of the dry chick feed, as their systems require grains to grind, for which grit must not be forgotten; then if cool clean water daily, litter to scratch in and shade are supplied, they should come along in quick time for laying at an early age, while the broilers and fryers will be just the tenderest.



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Square plot, bounded on south and west by county road. This land is level and all fully improved. The orchard comprises 14 acres Muir peaches, 5 acres Foster peaches, 5 acres Mary's Ch ice peaches, 5 acres Susquehanna peaches, 5 acres Royal apricots, 5 acres Bleinheim apricots. Orchard is 16 years old, in good bearing. About one acre is under house gardens, barn, corral, etc.

The cottage of 7 rooms has concrete cellar, 4 sleeping room, large dining room, kitchen and summer kitchen. Running water and hot water.

EQUIPMENT—Engine for pumping water for house and garden. House garden has oranges, lemons, grapes, apples, pampas, plums, cherries, pears, flowers and vines; also good vegetable garden; blacksmith shop and tools. Orchard pumping plant equipped with 18-horsepower gasoline engine and No. 5 pump, throwing 480,000 gallons of water every ten working hours. Plenty of water and oil tanks; 2 packing sheds, 4 sulphur houses, steel track in shed to sulphur houses and drying yard; fruit room; pump and washing tank for trays and boxes; benches, ladders and buckets; tree props and about 4000 28x36 trays and 350 or more lug boxes.

Four fine American horses. One team weighs about 2800 pounds, the other about 2400; harness in sets; 2 wagon trucks; 2 buggies; 1 wagon with springs, 1 ditching machine; 1 three-section steel harrow; 1 three-furrow, 10-inch Deere steel gang plow; 2 single plows; 1 five-foot model F Deere disk; 1 single large wheel Deere disk and subsoiler; 1 spraying engine, tank and hose, pipe and nozzles; 1 dust sprayer and mixing tank; 1 Deere cultivator, brush rake and many other tools.

Taxes last year \$94.54. Absolutely clear title. Price of this property is \$25,000.00; \$10,000.00 cash and balance at terms to suit buyer, 6% net.

For further information and appointment to see property address:

OWNER, BOX 3, Care The Live Stock and Dairy Journal, SACRAMENTO, CALIFORNIA

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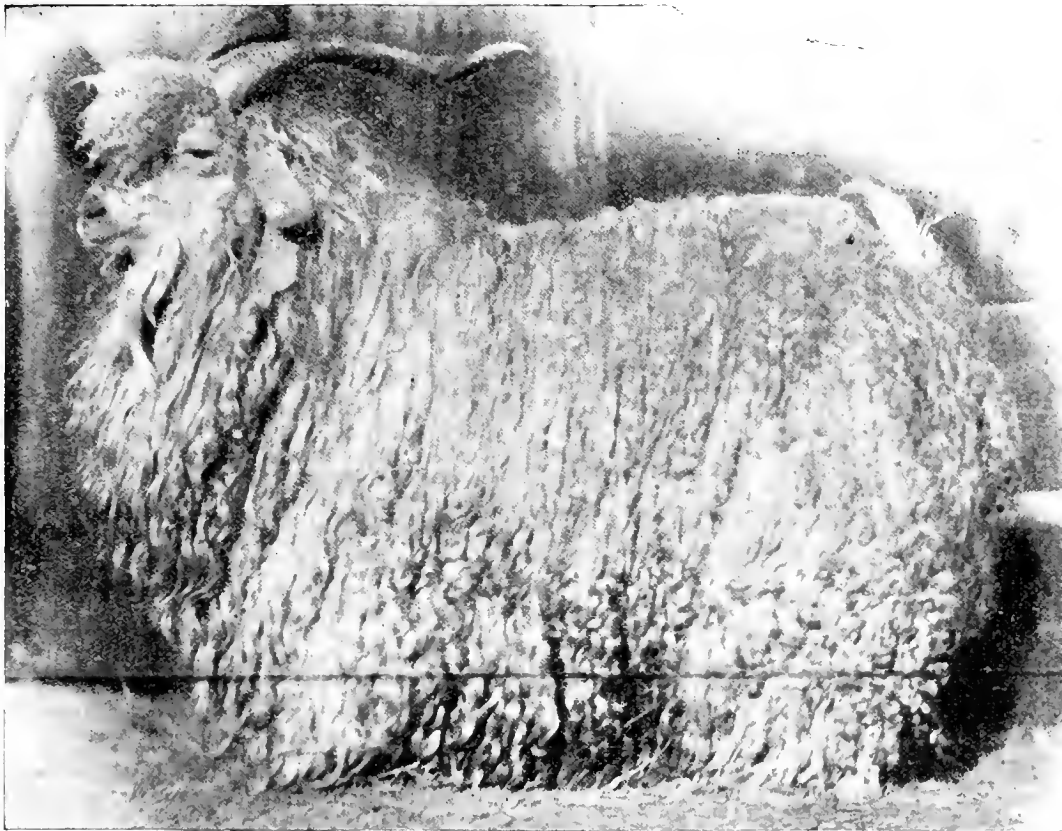
JAMES O'GARA, D. F. & P. A., EIGHTH AND K STREETS, SACRAMENTO, CAL.

THE LIVE STOCK and DAIRY JOURNAL

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

NOVEMBER, 1912



ROMEO—Champion Angora, Owned by J. V. Hardy & Co., Angeles, Texas
Fleece as shown was 20 $\frac{3}{4}$ inches long, weighed 18 pounds, and sold for \$115.00

AGRICULTURAL PUBLISHING COMPANY, SACRAMENTO, CAL.

The Live Stock and Dairy Journal

An Illustrated Monthly Publication for the Advancement of the Live Stock, Dairy and Poultry Industries of the Pacific Coast.

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CHARLES L. HUGHES

R. D. McFARLAND, Managing Editor
CHAS. L. HUGHES, Business Manager

TERMS OF SUBSCRIPTION:

One Year - - - - - \$1.00
Payable Strictly In Advance.

The Journal is stopped promptly at expiration of subscription period, unless remittance for renewal is received, thirty days' notice being previously given.

If you want to buy or sell any stock or merchandise in the great live stock, dairy and poultry centers of the Pacific Coast, get in touch with our advertising columns. We believe all advertising in this paper to be from persons or firms of the highest reliability. Every effort is made to protect our readers against misleading representation. We shall at all times appreciate evidence that advertisers have acted otherwise than in accordance with principles of strict business integrity.

The Journal is issued on or about the 5th of each month. Copy for all reading and advertising matter must be in our office not later than the 25th of month preceding date of issue.



CALIFORNIA STATE DAIRY ASSOCIATION.

The newly formed State Dairy Association formed at Turlock October 18th-19th appears to have been formed upon proper lines, as a reading of the Constitution and By-Laws will show.

There were more dairymen in attendance than at the time of the State Fair meeting, but the attendance was much lighter than it should have been, especially in a district as thickly populated by dairymen as the district surrounding Turlock. However, what the meeting lacked in numbers was made up in enthusiasm, and the plans finally decided upon seem to be as effective as any which could be placed in operation at the present time.

The new association has as President J. W. Guiberson of Corcoran, a practical dairyman, who has a dairy of 200 cows, and who has made a substantial success in the business. Mr. Guiberson is also a man of wide interests, and his experience and practical knowledge makes him a particularly good choice in the development of the new association.

The association also made a good selection of its Secretary, S. A. W. Carver of Los Angeles. Before becoming intensely interested in dairying and dairy products Mr. Carver was a brilliant lawyer. He brings to the dairy industry the same brilliance of mind which characterized his work in the legal profession, and he has performed notable service to the dairymen of his city and county, and of the whole state of California by his efficient activities in matters of legislation which

have resulted in invaluable good to the dairy industry.

One of the principal aims of the new association is the formation of local and county associations of dairymen. The constitution of the State Association provides that only delegates from such associations shall be entitled to participate in the activities of the State Association, the State Association being a corporation having three officers and a directorate of nine.

This appears to us to be the ideal plan, for it encourages the formation of local associations, and it is the small community organization which is the real meeting ground of practical dairymen. In these associations will be solved the vital questions of testing, grading, feeding and breeding, and the issues which arise to affect the dairy industry in a state or national way can here be discussed and taken up to the state organization through the delegates appointed. In this way every dairyman in the state can have the benefit of his local organization and the benefit of reliable representation in the State Association.

The Constitution and By-Laws of the State Dairy Association are published elsewhere in this issue.

AN OBJECT LESSON.

One of the very best object lessons that has come to our notice regarding the advisability of knowing the value of dairy bulls before sending them to the butcher (through testing the heifers got by them and keeping records) is found in a recent issue of the Michigan Dairy Farmer.

The Dairy Farmer wrote to the breeder of Valdessa Scott 2d, the Holstein cow that recently broke all records by making in excess of forty pounds of butter in a week, regarding her breeding, and the reply from him contained, among other things, the information that neither Valdessa Scott 2d nor her full sister were considered "strong and robust" cattle, and that was why he disposed of them along with a lot of other heifers. Also that their sire was sold to the butcher for beef, as "there was no evidence at that time that he would become the sire of the world's champion cow over all breeds and ages."

Here, indeed, is some food for thought for those breeders and dairymen who have disregarded modern practices designed to prove the real value of individual dairy cattle. Valdessa Scott 2d was sold before she produced her first calf, and there was no opportunity for her to prove to her original owner her worth, even had he been in the habit of testing; and not knowing the true value of the heifers the breeder had nothing upon which to base the value of the sire. In this instance the get of the bull might have proved to be worth several thousand dollars had he been spared from the butcher until his heifers became producers.

The mere breeding of a bull is shown in an instant by a glance at his pedigree, but the degree of prepotency possessed by him can only be determined after months of patient waiting. Pedigree is of little value in a sire without individual prepotency. The pedigree may inform us that the dam and grand-dam produced 30 pounds or more of butter in seven days, but what of that if the bull does not transmit to his progeny the ability to make large yields? It seems that when a man has a well-bred bull of desirable individuality that it is well worth his while to keep him at least until his first heifers drop their calves and their productive value is ascertained. Likewise it is well to keep purebred heifers until after their initial calving, for they may be world beaters without the owner knowing it.

THE FARMERS' INSTITUTE.

The Farmers' Institute work of the University of California for the current year is now being planned. It is announced that \$15,000 has been set aside for this important work, through which it is made possible to send agricultural experts out among the farmers of the State to spread the knowledge of methods which will improve crop conditions, and which help to make farm life more pleasant and more profitable. The Farmers' Institutes take right to the door of the country folk opportunities for information and education they can not have time to gain through other sources.

In stock and dairy communities, for instance, it is aimed to promote the planting of alfalfa, timothy and clover that a given acreage will support an increased number of cattle over those that can be maintained only on wild grasses; in dairying the use of the Babcock test is demonstrated as a means of determining which of the cows are the profitable producers and which the boarders; in the fruit growing district it is demonstrated to the orchard owner that through thinning his fruit freely he increases the weight and quality of his crop; in grain growing deep plowing, drill sowing and the use of improved seed are urged; in household subjects the preparation of foods in a manner that assures digestibility and the importance of proper sanitation about house and yard are gone into. All these are only a suggestion of the scope of the work carried on through this valuable department.

Last year the institutes were attended by 37,000 persons in 107 different places, while 102,624 persons visited the agricultural demonstration trains, which are handled by the same department.

Watch for the announcements of the Farmers' Institutes in your community and be sure and attend, for you can always learn something that will help you.

PROGRESS THE WATCHWORD.

So many new records have been made by the Journal during the past year that we are beginning to look upon them as a matter of course. For instance, September issue of 14,300 copies was the largest ever published by us, and it is worthy of note that it contained the greatest amount of display advertising of purebred stock every carried by any publication in a single issue on the Pacific Coast.

That fact is interesting in many ways. It goes to show, in the field covered by the Journal, that there are an increasing number of breeders of purebreds, and that the truth of the purebred principle is being recognized by a rapidly increasing number of progressive men. The day has passed on this coast when purebred bulls must be sold for beef and registered swine sold at the market price of pork.

The advertising of purebreds is beginning to have its effect, as many a veteran breeder who reads these lines can testify. When we speak of the advertising of purebreds we do not refer entirely to the number of inches of display advertising which the Journal carries. Every article in the Journal which sets forth the excellence of any purebred individual is an advertisement of the purebred idea, and we have in mind many of our subscribers who have stated to us that they were first interested in purebreds by reading the Journal. Having once grasped the idea, the matter then became merely a selection of breed. These are incidents which encourage us to greater effort in enlarging the field of the Journal.

This issue, November, sets another new record for us. The Journal now has over 12,000 paid in advance subscribers

for periods ranging from one to three years. Every month shows a substantial increase over the preceding one in number of subscriptions by mail and in renewals.

The large number of subscribers which the Journal now has, and the fact that almost the entire number are working together towards BETTER STOCK, makes it the greatest advertising medium for purebred stock to be found on the Pacific Coast today.

Sixteen months ago we promised our subscribers a better Journal. We have made good our promise to the extent that we have made a number of valuable additions to our contributing staff and by changes in type and in the number of pages in the Journal. We are today printing in each issue over 110 per cent more reading matter than we did sixteen months ago. We again promise a better Journal, and in twelve months we hope to make even more improvement than we have in the past sixteen.

We wish to ask all of our subscribers to examine the name and address printed upon this copy of the Journal, and if incorrect in any particular to kindly notify us. We recently installed a new mailing machine which necessitated the transfer of our entire mailing list from the old system to the new. Our entire mailing list, including subscribers, exchanges, etc., is over 13,000, and we can hardly hope that in spite of our careful checking, we have not made an error or two, which we will gladly correct if called to our attention.

GRAND BULLS FOR CALIFORNIA

At a recent sale of Shorthorns in Kansas City, T. B. Gibson of Woodland, Cal., bought a splendid yearling Shorthorn bull to be placed at the head of his celebrated Roselawn herd. He is Ringleader, a son of the great show bull, Ringmaster, who has been four times champion at the Kansas City show. The youngster took the eye of a number of bidders, and Mr. Gibson had to do some lively bidding, paying \$1000 for him. The calf has stood first in class wherever shown, and gives promise of developing into a great sire. Mr. Gibson is to be commended for his enterprise in bringing the best bulls obtainable to this State, as it was only two years ago that he brought out a choice individual to head his herd. While in the East Mr. Gibson bought for A. W. Foster a bull calf that is a half-brother to Ringleader, having also been sired by the great Ringmaster. This surely is a pair of grand bulls for California.

Owing to the necessity of his presence at San Francisco to assume his position as Director of the live stock department of the Panama-Pacific International Exposition, the resignation of D. O. Lively as Vice-President of the Portland Union Stock Yards Company will take effect October 31st. O. M. Plummer, Secretary and Treasurer of the company, will carry on the work that Mr. Lively has had in charge.

The man who stops his advertisement after one insertion because he has received no response from it wastes his money and demonstrates his misunderstanding of correct publicity methods and their results. The purchasing public is fickle and forgetful. The issue in which your advertisement does not appear is the one which the man who wants just what you have to sell picks up for guidance. Such is the well-known fiendishness of circumstances. The only safe, sensible and successful way to advertise is to keep everlastingly hammering at publicity as long as you have, or intend ever to have, anything to sell. Exchange.

THE LIVE STOCK and DAIRY JOURNAL

The Big Live Stock
Dairy and Poultry
Magazine of the
Pacific Coast
Established 1901

Volume 11 SACRAMENTO, NOVEMBER, 1912 Number 11

KINGS COUNTY FAIR, CALIFORNIA

The 1912 Kings County Fair was successful from every standpoint of exhibits, but while the attendance was better this year than last, yet this Fair deserves a much larger gate than it has been getting.

The public spirited citizens of the county who make the Fair possible deserve abundant credit for the high class of their Fair and the excellent manner in which it is handled.

From a live stock standpoint the showing at Hanford was the best yet seen in the State outside of the State Fair. There are many of the best herds and flocks in the State at home in Kings County and all of them were represented by entries at the Fair.

Breeding in Kings County is not confined to any particular class or breed of live stock, and all breeds appear to do equally well. The climate appears to be well adapted for the development of constitutional vigor in animals, which fact is perhaps best illustrated by the diversity of climatic conditions to which Kings County purebreds are subjected after being sold. Take Charles A. Kimble's Rambouillets, for instance. Some of Mr. Kimble's best customers are located in the high altitudes of Arizona and New Mexico, these breeders having found through long experience that Kings County sheep do exceptionally well in their climate. We hear occasional reference to "down in the hot San Joaquin Valley," and to the man who does not know, the phrase, no doubt, raises a bit of prejudice in his mind. Instead of being "down," the country around Hanford is some 200 feet higher than the cities of San Francisco, Sacramento and Stockton. As to the "hot" part of it, Mr. Kimble showed an ewe with as fine and heavy a nine-inch fleece as one would wish to see, and had several others with fleeces almost as heavy.

The Bassett Poland Chinas are always in good flesh and have been shipped for years to breeders in outside states, foreign countries and to the entire variety of climates which go to make up California, and they do as well in one place as another.

Kings County swine find favor with Oregon breeders, a number of the Bassett Poland Chinas having been bought by them, and recently a shipment of Duroc Jerseys was sent out by J. Frank Smith & Son to Oregon.

The first lot of animals to face the judge this year was, as last year, the aged Percheron stallion class. The class was not quite up to last year in quality, but was nevertheless good. The grand champion stallion was found in the entry of William Sageser.

The Shire classes were especially good. The great stallion shown by Charles Kimble and S. E. Railsbach was easily the best in the show. Ruby & Bowers showed a good 3-year-old which was sold before he left the grounds.

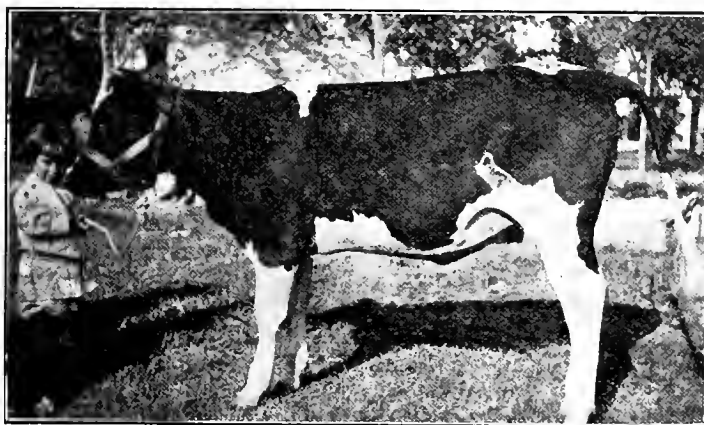
Five imported Shire mares were shown by James W. McCord. A visiting English judge of Shires pronounced two of these mares to be

among the best that ever left England, and the lot of five to be a credit to the breed anywhere.

The farm horse classes reflected especial credit upon the breeders of the county. Fumiste, the grand Percheron stallion owned by M. Bassett, has sired a great lot of colts, and these, with the Shires sired by the Kimble horse, make a great showing by themselves.

The good quality of jacks bred and raised in Kings County is apparent in the stock shown in the jack, jennet and mule classes. F. M. Fraser had the grand champion jack again this year, a gray of great body, large bone and rugged conformation.

James W. McCord showed individuals of the consistently good type which he has bred for years in Kings County, winning a large share of the ribbons.



May Oak De Kol 2d Homestead, Grand Champion Holstein Cow at Kings County Fair. Owned by Robert Kimble, Hanford, Cal.

In the beef cattle classes the herds of Howard Cattle Company and T. S. Glide contested for the ribbons, with the Glide herd winning the majority of firsts.

The Newman Herefords were a center of attraction, their fine quality and excellent show condition being remarked by all who saw them. Norman Hale had them looking as fit all week as though there was another prize in sight. It looks as though good thorough work is a habit instead of an effort with Norman.

The dairy cattle classes were by far the best yet shown at Hanford. Jerseys were represented by entries from three herds. The Locke Jerseys were shown in their usual good form and carried away most of the ribbons.

Two especially good Jerseys were shown by R. L. Waltz. His cow, Victor's Lady Rose, is a good show animal, besides having an official 365-day butter record of 443 pounds 6 ounces as a 2-year-old.

The Waltz bull, Ruth's Golden Glory, is an unusually good specimen. In fact, he is so good that had he been shown in the 2-year-old class at the State Fair we are inclined to believe that he would have changed the complexion of the awards in that class. He was compelled to show in the 3-

year-old and over class at Hanford, and could hardly get away with King's Valet.

G. T. Farmer won again with his Guernsey bull, Mabel's Joaquin of Palmherst. We hope to see Mr. Farmer show some Guernseys in the cow classes next year. From present indications there will be at least a few Guernsey herds in competition at Hanford next year.

The Holstein classes provided the hot competition of the dairy classes, five herds being represented.

In the aged bull class Meg o' the Mist Legend won the blue, and was later made grand champion. Meg o' the Mist Legend is an individual of good size and considerable dairy quality.

In the 2-year-old class the good bull, Sir Segis Hengerveld De Kol, was an easy winner, and in the yearling class

for the honors, and came away a winner.

In watching the progress of the three last mentioned herds, the writer cannot refrain from speculating as to how much of the good showing made can be credited to Mrs. Gilkerson, Mrs. Kimble and Mrs. Clark. Many men have written and spoken of the great enjoyment and satisfaction which they extract from life through the breeding of fine stock. Comparatively few women have taken up the business seriously on their own account. Yet what a wonderfully useful and absorbingly interesting field is open to the woman on the farm who can take an intelligent interest in the breeding of purebred stock.

The swine classes were filled with some great stock. The Bassett Poland Chinas were, as usual, the star attraction with some, with the Smith Duroc Jerseys a close second. W. Bernstein had a number of good young Poland Chinas in the show, but was somewhat handicapped for a show herd by having made a large sale of many of his good ones some weeks ago.

E. F. Bradley had a number of Polands inside the money and stock that can get inside the money against the rest of Kings County certainly has some quality.

The Smith Duroc Jerseys showed up much better than last year, as the stock at that time was new in California, and has now had something over a year in which to develop under Kings County conditions. The herd boar, Nebraska Sensation, has fulfilled the promise he bled out last year, and is a remarkably good individual of good length, great depth, very well sprung ribs and a great deal of type. He showed in good breeding flesh weighing 600 pounds. This boar has sired a great lot of pigs of good quality.

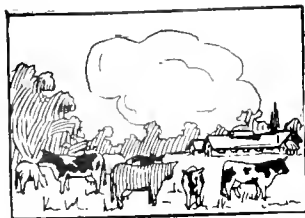
The 6-months-old Smith boar, Colonel Chief, is a promising young boar of type and quality. He carries some of the greatest blood of the breed, being close to King of Colonels and Ohio Chief on his sire's side and on the side of his dam traces to Crimson Wonder and Orion Chief.

We also noted a good young boar out of Rose Perfection, and an outstanding under-1-year-sow out of Rosebud Model and sired by Nebraska Sensation. This sow showed at 11 months of age weighing 330 pounds in breeding condition, carrying no surplus fat.

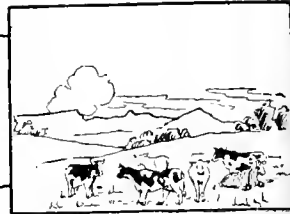
The Brown herd of Durocs contained a number of good specimens of the breed, and another year should develop some splendid ones in this stock. Dr. Frank Griffith showed some good Berkshires, and Robert Kimble had a few head of good Berkshire pigs entered.

Bryant Brothers were there with Mulefoots, and have some of the best of the breed we have seen in the State. They were not in as high flesh as the ones they showed last year, but showed plenty of frame and constitution.

The sheep exhibits were confined
(Continued on page 14.)



THE DAIRY



Minutes of Organization Meetings of California State Dairy Association Turlock, October 18th and 19th, 1912

Friday morning, October 16th, at 8:30, the Organization Committee met at Carolyn Hotel. Present, J. W. Guiberson, Guy H. Miller, Fred H. Daniels, S. O. Walker and the Secretary. By invitation there were also present S. A. W. Carver of Los Angeles and Bernard Crowley of Ferndale. Constitution and By-Laws of the State Dairy Associations of New York, Illinois and Indiana had been sent to each member of the committee. The Indiana Constitution was considered best adapted to this State, and was used as a basis and amended to conform to the ideas of the committee.

S. A. W. Carver was, on motion, appointed a committee of one to draft an article to provide for the affiliation of local or county dairymen's organizations.

The Chairman, J. W. Guiberson, was authorized to arrange with A. P. Ferguson, President of the California Creamery Operators' Association, for a convenient time to present the proposed Constitution to the assembled dairymen. The committee then adjourned.

At 12 o'clock noon, in the Turlock theater, the dairymen convened. After considerable discussion a motion was unanimously carried "that it is the sense of this meeting that a State Dairy Association should be formed." The meeting adjourned at 12:45 to meet at Hotel Carolyn at 1:30 p. m.

At 1:30 p. m. the meeting was called to order by Chairman J. A. Guiberson. A motion prevailed that the proposed Constitution and By-Laws be read and opportunity for discussion or amendment be given after reading each article. The Secretary then proceeded with the reading.

A motion was made and seconded to amend section 2 of Article I of the By-Laws in such manner as to allow voting by proxies. After much discussion the motion was defeated by a vote of 11 to 11, the Chairman voting in the negative.

The Constitution and By-Laws were, upon motion, adopted as read and amended.

Upon motion the Chairman was authorized to appoint a Nominating Committee to present names for officers as provided for in the Constitution. This committee was later named as Samuel Poorman of Alameda, Bernard Crowley of Ferndale and S. C. Walker of Tulare.

The meeting adjourned at 2:30 p. m. to meet at the same place the following day at noon.

Saturday noon, October 19th, the meeting was called to order by the Chairman, J. W. Guiberson.

S. O. Walker presented a substitute for Article V of the Constitution, and upon motion the substitute was adopted.

S. A. W. Carver presented an Article known as Article IX of the Constitution, providing for representation of local or county organization as auxiliaries, which was adopted upon motion.

Samuel Poorman, as Chairman of the Nominating Committee, presented nominations for officers as follows:

President, J. W. Guiberson, Corcoran; Vice-President, Bernard Crowley,

Ferndale; Secretary-Treasurer, S. A. W. Carver, Los Angeles.

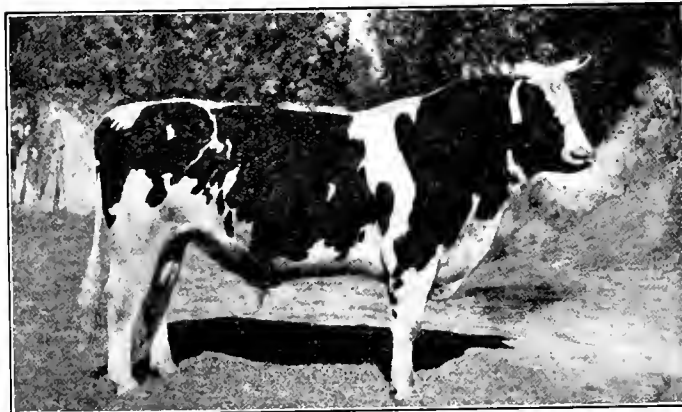
Directors to set with above officers: S. O. Walker, Tulare; W. H. Saylor, San Francisco; Guy H. Miller, Modesto; J. H. Davidson, Berkeley; W. C. Guilford, Willows; Assemblyman Judson, Holtville.

Upon motion the Secretary was instructed to cast a ballot for the persons named.

The Secretary announced that the ballot was so cast, and the officers were declared elected.

Twenty-four of those present paid \$1 each toward membership in the association. Upon motion the Secretary was instructed to write each member, authorizing him to organize local dairy associations in his home section.

The Constitution and By-Laws, as finally adopted, are as follows:



Meg o' the Mist Legend, Grand Champion Holstein Bull at Kings County Fair. Owned by G. U. Clark, Hanford, Cal.

ARTICLE I. Title.

The name of the association shall be the California State Dairy Association.

ARTICLE II. Place of Business.

The principal place of business of the association shall be the city of San Francisco, at the office of the Secretary of the State Dairy Bureau.

ARTICLE III. Objects.

The object of this association shall be to secure the co-operation of farmers and dairymen or parties engaged in the production of dairy products; to promote the business interests of its members; to procure and diffuse scientific and practical knowledge in all things relating to dairying; and to aid in forming local or county dairymen's organizations.

ARTICLE IV. Officers.

The officers of this association shall consist of a President, Vice-President, Secretary-Treasurer and a Board of Directors, consisting of the President, Vice-President, Secretary-Treasurer and six additional members, all to be elected at each annual meeting.

ARTICLE V. Membership.

The body or membership of this as-

sociation shall consist of the Presidents of each county or local dairy organization and of delegates chosen each year by each such county or local organization on the basis, or ratio, of one delegate to each twenty-five members of such organization, or majority thereof, together with the Board of Directors of the State Association.

ARTICLE VI. Annual Meetings.

The regular annual meetings shall occur at such time and place as may be designated by the Board of Directors, or by a majority vote of the association at the annual meeting.

ARTICLE VII. Penalties.

Any person violating the requirements of the Constitution or By-Laws shall be subject to expulsion at the next annual meeting.

ARTICLE VIII. Amendments.

This Constitution or By-Laws may be altered or amended at any regular

ARTICLE III.

Duties of the Vice-President.

The Vice-President shall preside at all meetings in the absence of the President, and perform the duties assigned to that office.

ARTICLE IV.

Duties of the Secretary-Treasurer.

Section 1. The Secretary-Treasurer shall keep full and accurate minutes of all acts and proceedings of the meetings, conduct all correspondence, receive all funds, collect all money due, shall pay and preserve all vouchers for bills and expense of the association when so directed by the Board of Directors.

Sec. 2. He shall notify all members of the time, place and object of all regular meeting and called meetings, at least one week before the time of meeting.

Sec. 3. He shall turn over to his successor all books, papers or money or other property belonging to the association, and shall make full report at the annual meeting.

Sec. 4. He shall receive for his services such sum as the Board of Directors may from time to time designate.

Sec. 5. He shall file with the Board of Directors an approved bond in the sum of one thousand dollars (\$1000), the expense of which shall be borne by the association.

ARTICLE V.

Duties of the Board of Directors.

It shall have the management and control of the business of the association, audit the claims against the association, audit the books of the Secretary-Treasurer and perform such other duties as the association may desire. The majority of the Board of Directors shall constitute a quorum.

ARTICLE VI.

Committee on Resolutions.

The President shall at the annual meeting appoint a committee of four whose duties shall be to act with the Vice-President to draft resolutions and to present them at the next annual meeting. The Vice-President of the association shall always be the Chairman of this committee.

ARTICLE VII.

Expenses and Liabilities.

Section 1. Necessary expenses that may be incurred, with the approval of the Board of Directors, shall be binding on the whole association and paid from the funds of the treasury.

Sec. 2. Should there not be sufficient funds in the treasury the Board of Directors may assess each member pro rata and collect such money once; provided, however, that such assessment shall not exceed one dollar (\$1) in any one year, without the unanimous consent of the association.

ARTICLE VIII.

Order of Business.

Robert's Rules of Order shall be accepted as standard authority, when not in conflict with the By-Laws.

LEROY ANDERSON,
Temporary Secretary

meeting by two-thirds vote of the paid members present.

ARTICLE IX.

Auxiliary Associations.

Each county or local dairy organization as auxiliaries of the State Association, shall pay into the treasury of the State Association annually a sum equivalent to 10 cents per member for the total membership at the time each county or local organization elects its delegates to the State Association, together with \$1 for each delegate member of the State Association.

BY-LAWS.

ARTICLE I.

Section 1. The officers of this association shall be elected at the annual meeting, by ballot, to serve one year, or until their successors have been elected.

Sec. 2. No member shall be allowed to participate in the election of officers who has not paid his annual dues in advance.

ARTICLE II.

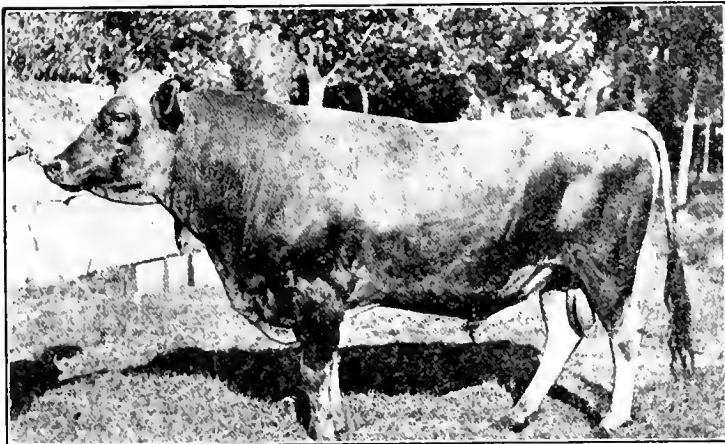
Duties of the President.

Section 1. The President shall preside at all meetings of the association.

Sec. 2. He shall have the Secretary call all special meetings.

Sec. 3. He shall appoint all special committees when not elected by the association, and sign all official documents.

Dr. Thomas Hunt has arrived from Pennsylvania to take his new position at Berkeley as dean of the College of Agriculture, director of the United States experiment station and professor of agriculture in the University of California.



Ruth's Golden Glory, a Particularly Good Jersey Bull. Owned by R. L. Waltz, Hanford, Cal.

GUERNSEY ISLAND SHOW HONORS ANCESTRY OF LORD KITCHENER.

In the October issue of the Guernsey Breeders' Journal is to be found a report of the August show of the Royal Guernsey Agricultural Society on Guernsey Island.

The affair is referred to as Governor of the Chene's Day, as on this occasion the 13-year-old bull not only walked off with the greatest honor himself, but many of the best awards were taken by his immediate or more remote descendants, and the old bull is referred to as follows:

"His prize record is a great one, probably greater than that of any other dairy sire, and if we put to his credit the prize record of his progeny, greater than that of any specimen of the bovine race."

His daughter, Le Fleur du Jardin XII, was first in the aged cow class, and her son, an inbred of the Chene blood, first in his class.

"The third class of cows—Special Dairy Class—is a distinctive feature of this show. The judges are asked to award the prizes to the animals they think are most likely to be good producers—in point of fact putting themselves in the place of buyers—that will require animals that will fill the pail.

"Here the old La Fleur du Jardin X was the first to take the judge's eye, while the 2d and 3d were of about equal merit, both looking like good producers.

"This class of fourteen cows was undoubtedly, the best in the show."

La Fleur du Jardin X was awarded the silver cup offered by the society for the best cow in the show, and also the challenge cup by the Guernsey Farmers' Association for the best cow present.

As La Fleur du Jardin X is the dam and Governor of the Chene the grand sire of Lord Kitchener, former head of Charles G. Lathrop's Guernsey

herd at Stanford University, California, where he has left many promising daughters after having been sold to head the Bella Vista herd at Martinez, owned by Dr. J. W. Henderson, where he will continue the good dairy work, the above is of interest to these gentlemen and to many dairymen throughout the State, where sons of this great bull are now to be found. Such a combination of showing quality and productiveness do not always go together.

The Live Stock and Dairy Journal— We are advised by M. H. Gardner, Superintendent of Advanced Registry, that the production of Aralia De Kol during the week after the close of her year exceeds that of the week in the beginning, and that by substituting this week for the first week she makes a gain in both milk and butter-fat.

Mr. Gardner's report on this cow shows: Milk, 28,090 pounds; butter-fat, 913.86 pounds; instead of 28,065.9 pounds milk and 910.18 pounds fat, as at first reported. On the official seven-day test beginning 365 days after calving, Aralia De Kol produced 501.4 pounds milk and 17.12 pounds of fat, equivalent to 21.4 pounds butter, 80 per cent fat.

A. W. MORRIS & SONS.
Yolo County, Cal.

The first show of the Pacific International Dairy Show Association will be held at the Union Stock Yards, Portland, Ore., November 18th to 23d, and there is every indication that it will be very successful. Exhibitors are expected from British Columbia, California and Eastern points, and there will be numerous entries of milk, cream and cheese. O. M. Plummer has been selected as Secretary and General Manager of the show, vice D. O. Lively, who resigned to take up his work as Director of live stock for the Panama-Pacific Exposition.



Victor's Lady Rose, Register of Merit Jersey Cow. Owned by R. L. Waltz, Hanford, Cal.



DAIRYMEN ATTENTION!

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Best blood in the West. Bulls, cows, helpers and calves. Our service bulls were sired by Grand Champions. Write for pedigrees and prices.

BROWN & BRANDON,

Petaluma,

California.

I HAVE A FEW BULL CALVES, Sired BY MY PREMIER HERD BULL.

DISTINCTION'S FINANCIER

His dam, a daughter of Financial King, sold for \$2300 in Walker's 1907 sale. He is 75 per cent the same blood as Sans Aloï.

I also have two sons of Golden Fern of Rockland, one son of Sans Aloï, one by Rainbow's Golden Lad, two by Jolly Brookhill Fern.

All go at farmers' prices for quick sale. Delivered f. o. b. San Francisco. Satisfaction guaranteed or money back. Have also a few cows for sale. Pictures, pedigrees and prices on application.

IDYL FERN DAIRY

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WE LEAD IN JERSEYS

Ten purebred and registered Jersey Heifers, ten purebred and registered Jersey Bulls, all strong, robust fellows, for sale. They are sons and daughters of our best milk producers, and sired by our famous herd bull. Largest herd of registered Jersey cattle in California. Write for prices and pedigrees. Also have purebred Jersey cows for sale.

Rancho Dos Rios, R. E. WATSON, R. F. D. 2, Modesto, Cal.
Manager



Senior Yearling Heifer Maud T. of Edgewater

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OFFICE, 1501-3-5 SOUTH MAIN STREET, LOS ANGELES, CAL.

DUTCH BELTED CATTLE

At the Oregon State Fair, 1912, my herd won all first prizes but two and all Champion and Grand Champion prizes. At the California State Fair, 1912, my herd won all first prizes but two, both gold medals and all Championships but one. Young stock of the finest quality for sale. Write for circular.

Frank Reed Sanders,

SALT RIVER VALLEY,

MESA, ARIZONA.



FLORIBEL HERD

of Registered

Holstein-Friesians

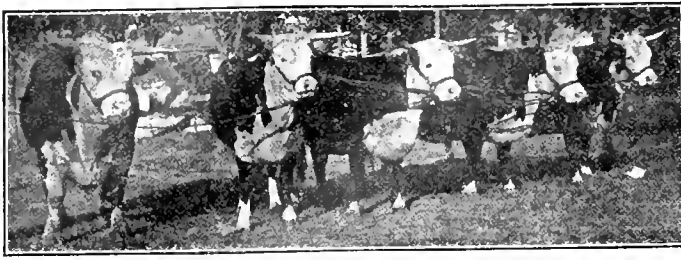
Herd Headed by

Prince Beauty Pietertje Segis (84485). Born January 12, 1911. The records of his dam and the two nearest dams of his sire average 31.63 pounds. He is a son of Beauty Pietertje Prince, who was from a 32.5 pound cow, and by the best son of Beauty Pietertje (30.51 pounds). His dam the best daughter of King Segis. A few Young Bulls on hand. Will take orders for future delivery.

Floribel Land and Cattle Company

SAN FRANCISCO OFFICE, 815 Nevada Bank Bldg.

HARDWICK, CAL.



A Few Select Herefords From the Herd of Simon Newman Co., Newman, Cal.
Herd Bull Young Donald at Head.

Breech Presentation in Calving

(Written for The Live Stock and Dairy Journal by E. M. Stetson.)

There is, during certain seasons, a proneness with some cows to breech presentation in calving. This is a serious proposition, and is quite as likely to occur in herds of valuable stock as in the commoner ones. It is one that needs great care, both at the time of the delivery and afterwards.

General causes may be from insufficient food at the latter part of the gestation with large supplies during the first periods. By heavy feeding during the earlier months the foetus becomes large of frame and well filled out in flesh; then, when, during the latter part, the food supply is shortened, there is a weakening of the muscular activities of both young and mother.

The walls of the abdomen become weak and flabby, and the transverse and vertical muscular activity necessary to help the young being to turn over and make itself strong and active being thus weakened, there is a tendency to lie dormant on the part of the foetus. Thus, when the time comes for delivery the young calf is in the wrong position, and has to be turned over or tear its mother all to pieces by the wrong presentation; or else it dies in the womb and is expelled after dissolution has begun.

At the time of delivery the hand may be slipped inside, after a thorough washing and sterilizing and greasing, to determine just what the position of the calf is. A rope of small size may be used, after sterilization and greasing, to make a noose which may be slipped over the under jaw of the calf, or around the front foot, for the head is usually lying under the body. This gets the feet up where they belong, the two front feet pointing outward. Sometimes these will have to be worked, one at a time, to the front, and the pulling done on the feet before the head is moved.

If the feet can be gotten into proper position the head is easily managed with gentle pulling by the rope that is fastened to the head, but heavier on the feet. It is not an easy thing to do, and must be managed well, always remembering to get the position as nearly normal as possible; although perfect position may not be attained, get as near to its as possible and then proceed to remove the calf. It is sometimes necessary to go about the work very quickly, where the cow has been long in labor and is much weakened by the pain and strain. Generally, however, some time may be taken in getting all things ready for the final pull.

Now, when ready for the final pull, when the feet are projecting outside the vent, the pulling must be done in long, strong pulls, and without intermission. Do not stop even a few minutes to give the cow a rest—that is, if you want to save the calf; for the moment you make this firm pull and get the head started, you have broken the soft bands and folds that bind the calf to its mother on the inside, and it no longer breathes through her body, but is an independent being by itself, a being with its head covered

by a tight bag and with little or no air, and with a tight compression about its neck. It will suffocate in a very short time if it is not taken out clear and free from its mother's body. Never forget this. Do not get excited and jerk, but pull easily, firmly, strongly and continuously, and get it into the world as promptly as possible, if it takes two men to do it. This is the main thing to remember in such operations.

Some veterinarians do not approve of washing out the cow after such operations, but it is a wise thing to do. Force water in and out—warm water with dilute disinfectants in solution. There are serious complications nearly always likely to follow such unnatural conditions, and it is best to use every care. Blood poisoning frequently offers greater dangers of infections to people undertaking the washing out after a time, so do it first when all is sterile.

The cow should be well cared for, fed soft mash and green feed, given a comfortable bed where there are no draughts. Her bag should be watched with great care. Caking and inflammation are almost certain to occur. Give flaxseed or feed meal for awhile, and massage the bag and milk duct in front of the bag, or bathe with hot water frequently. At the first symptoms of congestion of the bag, and when blood appears instead of a flow of milk, get into communication with a good veterinarian. Even then you will probably lose the cow. We lost two recently—large Holsteins, big milkers and very valuable—and we had a good veterinarian for both.

But in these cases we were told not to wash out the womb of the cow after the forcible removal of the calf, and we have reason to believe that failure to do this set up an irritation in the interior and caused the infection to spread to the milk ducts and glands, thence to the bag, where the trouble became malignant.

The blood came from the teats when squeezed, and had gases in it,

and was very offensive in odor. It is also dangerous to handle a cow that is thus infected, for fear of getting inoculated in any open places on the hands and arms. People have lost their own lives thus in trying to save animals. The case is too far gone when the infection extends to the teats and the bag turns black. There is hardly any hope, the animals suffer tremendously, and it is kinder to put them out of their misery, as well as safer.

It is just possible that electrical treatments would relieve such congested conditions, but these appliances are not generally obtainable on a ranch. The main thing is to provide against the setting up of these conditions due to blood poisoning. Make the animal, by close care and heavy feeding of rich, nitrogenous foods, immune from such unfortunate and dangerous conditions of subsequent disease.

It is wise, however, to be always observant of the condition of the cow during her carrying time. She should, as much as possible, be given regular rations—not too rich at the first part, with more grass and some bran, but not generally much corn meal or shorts. Let these come at the last, but she should not be forced then. The danger of heavy fed at the end is liable to result in caked bag by overmilk supply. The dangers at the first are by making large bodies that are difficult of delivery later on. So grade the feed and do not force the animal growth, but let it average up well.

The mistake comes when the cow is turned dry and left to forage for herself in the pasture. She does not get enough nourishing feed there to sustain her and keep up her strength and that of the unborn calf until its delivery. It is better to keep her in the stanchions and feed her the regular fare right up to the last than to run the risk of a breech presentation and all its attendant sufferings and dangers.

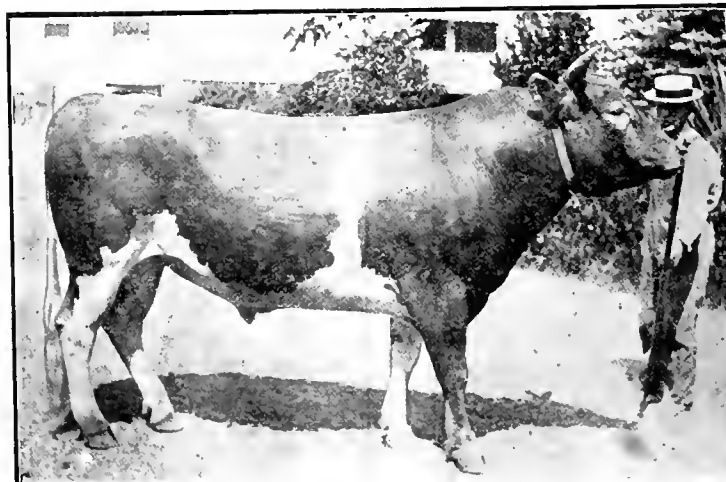
At a recent sale at Empire, Stanislaus County, Cal., sixty-nine dairy cows sold for \$6365, an average of \$105 per head. The highest price for a registered Jersey was \$200, and the highest for a grade Jersey was \$150. Young heifers sold for \$40, and a young bull calf for \$75. Mares brought \$315 to \$450 per span.

YOUR PAPER IS FINE.

The Live Stock and Dairy Journal—Your paper is fine. You may expect to hear from me again.

F. R. PEART.

Utah.



Raymond of Alta Vista. Head of Charles G. Lathrop's Guernsey Herd, Stanford University, California.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

Abortion

The Greatest Breeding Scourge

Can be Checked and Eradicated from a Herd by

HOOD FARM ABORTION REMEDY and

HOOD FARM BREEDING POWDER.

Giving the Abortion Remedy, a liquid, in the feed or drink or as a drench upon the first sign of abortion will check it and cause the cow to hold the foetus in a large majority of cases.

Treatment with Hood Farm Breeding Powder, as an injection, before the cow is bred, destroys germs, disinfects the organs and is a safeguard against another abortion. Many herds have been saved from the butcher by these two great Remedies. Write for full particulars, pamphlets and prices. All of our experience from 20 years of breeding is at your service. Do not experiment but try Remedies that have proven reliable.

C. I. HOOD CO., Lowell, Mass.

Bigger Stock Profits

Mix cut roots with dry feed, double its value. Roots have their place in the feeding economy of every barn and stable. Keep your stock healthy—they pay bigger profits on less feed. The

Banner Root Cutter is only machine making the "Non-Choke Curve"

Cut feed from roots, etc. Self-feeding; cuts fast and easy; 7 sizes for hand or power. Low prices. Book Free. Address

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The home of traveling men and tourists. American and European plan.

WEST DULEY, Proprietor.

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VETERINARIAN

Sacramento, California

Office and Modern Hospital—Thirteenth St. bet. 1 and J Streets

3--BULLS--3

Registered Holsteins of A. R. O. Dams. Growth, well marked and bull type. Bargain prices. No heifers for sale at present.

LINWOOD FARM,

Santa Cruz, Cal.

We have for sale cheap, an 8-h. p. gas engine in good shape. Price \$150.

Purebred Registered
HOLSTEIN CATTLE
The Greatest Dairy Breed
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Holstein-Friesian Assn., Box 165, Brattleboro, Vt

Holstein-Friesian Cattle

A Few Choice Registered Bulls and

25 Choice Registered Heifers.

Prices on Application.

CHAS. JAY WELCH, Los Banos, Cal.

SHORTHORNS MILK STRAIN

Attention Dairymen!

I am breeding the finest stock in the West. Write for prices and pedigrees.

JOHN LYNCH Petaluma, California

California Creamery Operators' Convention

The California Creamery Operators' Association held its thirteenth annual convention at Turlock October 18th and 19th.

There was a large and representative attendance, and the various sessions presided over by President A. P. Ferguson were a treat in the way of speeches and discussions bearing upon the production and manufacture of dairy products.

President Ferguson gave a concise explanation of the work of the association, and reviewed the good results which the association has already brought about.

Warren B. Thurston, Federal Dairyman in this district, made an excellent talk along lines of sanitation in dairying and the manufacturing of dairy products.

Judge Peter J. Shields was given an enthusiastic reception when he arose to address the meeting upon the "Future of the Dairy Industry." In his usual logical, convincing manner Judge Shields expressed his reasons for having an abundant faith in the future of the dairy industry of the world, and particularly of California and the Pacific Coast. Among other things he cited statistics which prove that the population of cities is steadily increasing at a faster rate than the population of the farms, and stated that this condition always will prevail in spite of back-to-the-land movements. This preponderance of population in the cities means a steadily dwindling percentage of the population to provide food for the world, and the consequence will be that those foods which provide the greatest amount of nutrition for the human body at the least cost, and which are at the same time the most pleasing to the taste will find increasing favor. The products of the dairy cow provide the greatest variety of economical, palatable food, and Judge Shields closed his remarks with the statement that the surest, simplest way to increase the present demand for dairy products is by the raising of the quality of those products by methods within the reach of the smallest dairyman in the country.

C. J. Mitchell of Los Angeles spoke upon the subject of "Marketing Creamery Butter," and presented many ideas of practical value to the trade.

One of the greatest object lessons of the meeting was presented by Professor Leroy Anderson in his speech on "Cow Testing Associations." Professor Anderson had prepared large charts showing the actual results obtained by testing herds in the Fernald Cow Testing Association.

The figures shown were a revelation to a number of dairymen present, who had never tested their herds, and it is safe to say that if as effective object lessons as this could be presented in all the dairy communities of California there would be an immediate and widespread interest in the forming of such associations.

S. A. W. Carver of Los Angeles read a masterly paper upon "Tuberculin Test of Dairy Cattle." Mr. Carver has devoted a great deal of time to a conscientious study of his subject, and his conclusions were appreciated by a large and attentive audience.

J. P. Murphy of Tulare contributed much practical information upon the gathering of cream, and as Mr. Murphy has put his ideas to practical test in the conduct of his own creamery and found them good, his remarks found favor with creamerymen and dairymen alike. In discussing the waste of money borne by the dairyman in having numbers of gathering

wagons from different creameries going over the same territory, Mr. Murphy cited one route in his experience where the cost of collecting butter-fat was actually over 5 cents per pound, most of which cost was, of course, borne by the dairymen on that route. Mr. Murphy made an earnest plea for the creamerymen and dairymen to get together and do away with the expensive cream gathering methods now in operation in California.

C. A. Starkweather, State Dairy Inspector in the Modesto district, read an excellent paper on "Inspection," and talked right out in school about some of the conditions which have prevailed on some of the dairy farms which he has inspected. Mr. Starkweather enjoys a great reputation for fairness and efficiency in his work, and a great deal of the vastly improved conditions upon the dairy farms in his district is due to his valuable counsel and advice.

W. H. Saylor, editor of Pacific Dairy Review, briefly reviewed the work of the Committee on Dairy Exhibits at Panama-Pacific International Exposition, San Francisco, 1915, and assured the gathering that the committee of which he is a member has the assurance of the Fair Directors that ample provision will be made for the greatest dairy show in the history of the country in 1915.

In speaking upon "The Future of the California Creamery Operators' Association," W. H. Roussel of San Francisco voiced his usual happy, optimistic sentiments, and his predictions for a bright, prosperous future have all the indications of complete fulfillment.

At the election of officers for the ensuing year, J. P. Murphy of Tulare was unanimously elected President.

When it came time to decide upon the meeting place for 1913 it looked as though Visalia had the meeting won, but after several eloquent pleas a secret ballot was taken and Tulare won out by a fair margin.

OPENING FOR CREAMERY MAN

The farmers of the Minidoka project, in southern Idaho, are looking for a practical man with a little money to invest to take charge of their creamery at Rupert. The plant is equipped with up-to-date machinery which will be run by electric power from the Government plant. This should be an excellent proposition for an expert creamery man.

The conditions for dairying in this section are unsurpassed. The farmers are eager to increase the size of their herds, and are putting in good stock. Alfalfa is the principal crop. At the present time much of the crop has to be shipped out of the valley, but it is much more profitable when fed on the farm. Pulp from the sugar beet factory at Burley should be available during the fall and early winter months. This is cheap and nutritious, and furnishes a change in diet for the animals that is beneficial. It has been estimated that three good cows will make the payments on a forty-acre farm when creamery service is available.

Rupert is the geographical center of the irrigable area, and is located on two branch railroad lines. It is enjoying a healthy and substantial growth, and promises to become the largest town on the project. It is laid out around a central park, its wide streets and boulevards already shaded by ornamental trees. The homes are lighted and heated by electricity from the Government plant.

Inquiries should be addressed to F. N. Victor, President of the Rupert Commercial Club, Rupert, Idaho.

Jersey Stock

For Sale

Seven Bulls, ranging in age from 6 months to 15 months, from authenticated cows. Prices very low, considering breeding. Also a few heifers. These are all very fine animals. Write or call at

Garden City Sanitarium,

SAN JOSE,

CALIFORNIA.

Well Drilling Machinery



Established 1879

You can make big money making wells. This is one of the few lines of work that are not over crowded. The demand for wells is far greater than can be supplied by the machines now at work. Well Drillers command their own prices. We build the celebrated HOWELL line of Well Machinery, for making deep or shallow wells of all sizes, for all purposes and in all kinds of ground. Our machines have all the latest improvements, do perfect work, are easily operated and are very FAST WORKERS. Write today for our free Catalog.

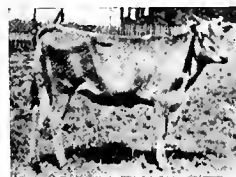
R. R. HOWELL & CO., Los Angeles, Cal.
Main Office and Works, Minneapolis, Minn.



HOLSTEINS

Purebred, Registered Bull Calves, sired by Acme Pontiac and Salambo Captain Riverside, and out of my Best Cows. Pedigrees and Prices on application.

J. W. BENOIT, R. 2, Modesto, Cal.



I offer for sale Bonanza Lad, son of Gertie's Lad, and six of his heifer calves. Also six grand-daughters of Imp. Flying Steed, half brother to Brookhill Fox, who won championships in England and America. These choice females are bred to freshen in January. For further particulars and prices write to

GERALD O. HILLIER,

Modesto,

California.



Riverside Sadie De Kol Burke.

Attention Breeders and Dairymen!

Are you in need of a herd sire? We are offering the choicest lot of

Holstein-Friesian Bulls

Ever offered in the State. Several Eastern bulls sired by Korndyke Queen De Kol's Prince, the sire of four daughters that average 30.22 pounds of butter in 7 days, and one with 1090 pounds of butter in one year. Also have a few bull calves by our herd sire, King Segis Pontiac Emperor, who is a grandson of Pontiac Clothilde De Kol 2d, and his dam a full sister of King of the Pontiacs. Will have some cows and heifers for sale later.

A. W. MORRIS & SONS

CALIFORNIA.

WOODLAND,



IDLE WILD FARM

BREEDER OF

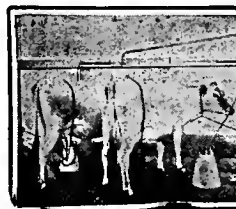
GUERNSEYS

WM. M. LELAND,

Turlock, California

Kitchener's Corona Boy, Grand Champion State Fair 1912

THE HINMAN MILKER



Is Now in Use in Many Dairies of California. It is Safe. It is Sanitary. Read the following:

Modesto, August 21, 1912.

C. F. Daniells & Son, Modesto, Cal.
Gentlemen—Have installed and used eight of the Hinman Milking Machines for four months on 100 cows, and find them to give the best of satisfaction in every respect.

Have found them excellent for milking cows with short teats. Two men milked my herd of 100 cows in not to exceed one and three-fourths hours. In all, I consider the Hinman Milker an absolute success. Yours truly,

E. T. THEOBALD.

C. F. DANIELLS & SON, Modesto, Cal., Agents for California and Oregon.

DAIRY FARMING AN ESTABLISHED SCIENCE.

(Written for The Live Stock and Dairy Journal by E. H. Haemann.)

Twenty-five or thirty years ago many valid excuses could have been offered by the dairy farmer for failure in the dairy business, or for being in the dark regarding the value of his cows and product therefrom. No easy, accurate or practical method was at hand to ascertain milk quality; per cent of fat, casein, etc., and very little information came to the average dairyman about scientific breeding, feeding, etc., but today there can be no excuse for failure for the dairy farmer if he is in earnest and employs modern methods which have been invented, improved and given to him. A vast fund of information has been worked out in the last twenty years along dairy farming lines; such as a better understanding of scientific breeding and feeding, Babcock test, type and conformation of the dairy cow, silage and silos, testing associations, improved dairy machinery and utensils, etc., and yet, with the above improvements, hundreds of dairymen can still be found who are continuing in the same rut and practices of thirty years ago.

A poor cow can be compared with an acre of poor land. The latter costs the farmer a certain amount for maintenance for taxes, tillage, seed, etc., as also does the cow for care, feed, etc. Whatever the land produces over and above the cost of maintenance is profit; but a poor crop only can be expected from poor land, and it is just the same with a poor cow. While the value of the crop from the land is computed according to the number of sacks or tons per acre, the value of the cow and her product must be determined by the scales and the Babcock test.

Dairy farming is a business of intensity and permanency. A great many dairymen have established themselves here and there, practicing modern and up-to-date methods, and to them a great credit is due to setting an example for others to follow.

Success lies, not in the number of cows a man keeps, but rather in the kind of cows that he keeps. It is more profitable to keep a small number of good cows than a large number of average cows. The cow is the foundation of dairy prosperity, and if the wrong foundation is started the best results can never be attained. A great many dairymen get discouraged and give up dairying, saying it does not pay, which can be traced in a great many instances to having started with a poor foundation.

The Babcock test is perhaps the most wonderful, yet simple, invention that has ever been given to the dairy industry. It has revolutionized the dairy business as much or more than any other one thing, and it could make as great a revolution over again if every dairy farmer would apply and use it on his cows today to weed out the boarders. No cow can escape the test of the Babcock test. Fifteen dollars invested in a tester, scales, sample bottles and record sheet will furnish the equipment needed. This outfit will pay for itself in a short time.

With the improvement of the milking machine and invention of others, and the entry in competition for superiority of no less than three different makes is an encouraging and healthy sign of this valuable machine coming to the aid of the dairy farmers when it is sorely needed.

VETERINARY

We cordially invite the readers of The Live Stock and Dairy Journal to consult this department. Questions will be answered free by mail, and a stamp should be enclosed for return postage. Give age, color and sex of animals, with full details of symptoms and conditions and previous treatment, if any.

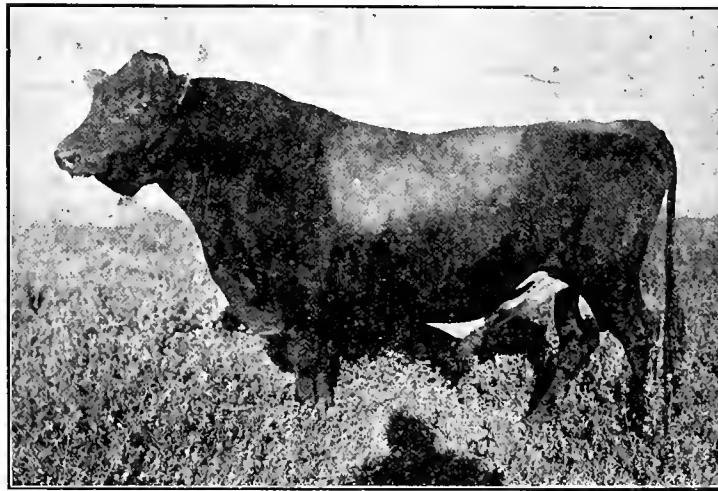
The Live Stock and Dairy Journal— I have just read the letter of C. D. M., Sutter, Cal., and your answer in the October Journal. Several of my cows act in the same manner as those of C. D. M., and I am thinking of using the treatment you prescribe. For two months I have been washing the cows out with water and a medicine prescribed for abortion. Still several of my cows have failed to get with calf, coming in heat the second time. Some have not come in heat the second time, so I do not know whether they are pregnant or not, and I am afraid to use the treatment you prescribe if they should be pregnant. If some of them should have been with calf some months ago I do not like to doctor them some weeks after coming in heat again unless necessary. Would be pleased to have you advise me just what to do—whether to doctor them now or wait until they come in heat and then treat them. I have not been

as the jawbone itself. What can be done for it? Oblige.—G. C. H., Rio Bravo, Cal.

The condition affecting your heifer is commonly called lump-jaw. It is caused by a fungus, and it is transmissible from one animal to another. Immediate destruction of the affected animal is advisable to prevent further spread.

The Live Stock and Dairy Journal— I have a large brown Norman mare with a big swelling half way down her neck, with a small puncture in the center. She has begun swelling under chest. What can I do for her?—D. McM., Alturas, Cal.

Open the small hole for about half an inch, then cauterize once or twice with caustic or carbolic acid placed on cotton on a small stick. Bathe swollen parts freely three times daily with carbolic acid solution—teaspoonful to pint of water. Do not use perox-



Marigold Exile King, Heading Guy H. Miller's Venadera Jersey Herd. His Get Won First in Get of Sire Class at 1912 California State Fair.

injecting the solution I am using into the womb, but have simply washed out the vagina every day. You say to inject the solution into the womb. I presume I must use my hand to insert the tube into the womb. I am using the solution to wash out the sheath of the bull also. Please advise me as soon as possible.—J. G. W., Salida, Cal.

Do not use solution on pregnant animals. The period of heat is a very favorable time for injection. Our contention is that the entire cause of condition under consideration lies in the womb, and injections directly into the womb is the only plausible way of relieving same. To further this argument, will state that in a pregnant animal the womb is closed and has no connection with vagina. The hand is used to guide the tube into the womb, but be sure it is a clean one.

The Live Stock and Dairy Journal— Have a young heifer calf about 5 months old, which has a large lump on the jaw. Feels like a growth of some kind on the jawbone. The lump was caused by a fall, I think, as she was running one day and fell over a small fence. About a week after the fall I noticed a little lump coming, and it has grown to be as large as a baseball, is very hard and seems to be on the jawbone. It feels as hard

ide of hydrogen on this kind of wound.

The Live Stock and Dairy Journal— I have a bay mare 5 years old who has a large, soft swelling on shoulder where collar goes. Have been using a liniment on it, but it does no good. Will you kindly advise me?—P. R., J., Imperial, Cal.

It is in all probability a cyst due to a bruise. Open same with sharp knife at lowest point and insert a clean

piece of cloth and allow same to remain for two days. Bathe three times daily with hot water.

The Live Stock and Dairy Journal— I recently lost a fine 3-year-old colt from bleeding to death after castration. He was castrated and wooden clamps applied. The clamp came off, and we did not know how to stop bleeding. I am asking your valuable paper for information in order that I may avoid the same trouble again.—S. S. K., Wabuska, Nevada.

Never allow anyone to castrate your colts with clamps, as they are very liable to come off, as you have already found. There are instruments made for that purpose, and very seldom do we get a hemorrhage. If so, it is while we are there and in a position to stop it. But if you must have it done with clamps and hemorrhage results, lay animal on back and tightly pack scrotum full of clean cloths and sew same in.

PUREBRED REGISTERED

Holstein-Friesian Cattle

A Few Young Bulls Out of Large Producers for Sale.

Minor & Thornton

KEARNEY PARK, Fresno County, CAL.

FOR SALE

High Grade Holsteins
Cows, Heifers, Bulls
Carlots or Less

A. L. SAYRE, Madera, Cal.

Registered Holstein Bull Calves

From \$60 up. Among them two great-grandsons of Colantha 4th's Johanna and Aggie Cornucopia Pauline, who averaged 35 lbs. butter in seven days.

L. A. HALL & BRO., Box 39A, Alviso Road, San Jose, Cal.

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Concrete Silos, Sanitary Dairies, Creameries, Refrigerating Plants, Irrigation.

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WOODLAND, CAL.

HOLSTEINS

Nothing to sell now, but we are booking orders for calves for future delivery.

Registered

Holsteins

Two Bull Calves and Two Yearling Bulls out of A. R. O. cows and sired by Teake Lyons 3d's Butter Boy. Prices reasonable. Immediate delivery. For further particulars regarding pedigrees and prices write or call.

H. B. COWAN,

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MODESTO, CAL.

Dairy Supplies

We Solicit Consignments of Hides

We carry a complete stock of the Best Lines of Supplies and Equipment for the Dairyman, Creameryman and Butcher. Gasoline Engines, Motors and Complete Irrigating Systems. Our prices are right. Special attention given to Mail Orders.

J. N. BLAIR & CO., Sacramento, Cal.



THE HORSE



A TRIBUTE TO THE HORSE.

If one animal more than any other has contributed to the welfare and happiness of mankind, it has been the horse. Forced into captivity, domesticated and interbred until he reveals the highest qualities of brute intelligence and beauty of form, has been man's patient and faithful burden bearer as well as his silent companion of the centuries. He has shared with man the hardships of exploration, the ages of chivalry, the struggle for democratic freedom, and the advance of commercial supremacy. In literature, in art, in song; in war, as well as in peace, he has stood by his master's side in the glorious descriptions of human achievement.

The history of the horse is in a large measure the history of the human race. He stands today as the highest embodiment of physical perfection, the most delicately constructed dynamo, the most beautiful animal creation that the ingenuity of man has been able to evolve by artificial means. And what an object of emulation he is to man himself for the scientific breeding of the human race; what a beautiful example of the power of labor and love if it could be assumed by man as a voluntary rather than an involuntary servitude.

As we look upon this noble friend of man, who is so often subjected to the neglect and cruelty of commercial greed and abject slavery, let us not forget that, though he may be owned individually, he is ours by race inheritance, ours to use, ours to enjoy, ours to protect, and that we owe it to him as well as to ourselves to demand for him justice and fair play. — Hugo Krause, in *Our Dumb Animals*.

WELL TO WORK THE STALLION.

"Lack of exercise, with high feeding, is the cause of 75 per cent of poor foal getters," said Dr. C. W. McCampbell, assistant in animal husbandry at the Kansas Agricultural College. "Exercise stimulates and strengthens every organ and function in the body. It is very essential in keeping the animal in good condition. The best kind of exercise is honest labor in the harness. Working the stallion not only improves his health, but makes him more easily handled."

"In beginning to work stallions, it must be remembered that the average American stallion is more or less pampered, and is therefore soft and fat, and must become accustomed to work. After he is once accustomed to work he can do more than any other horse on the place."

"If the keeper has no work for the stallion, he should drive him from four to eight miles every day, in and out of season. The animal should be allowed to rest for an hour before breeding. Some owners work their stallions only half a day at a time during the season, and patrons knowing that, come at the time when the animal is not working."

HORSES AND MULES HOLDING THEIR OWN.

The new year book issued by the United States Department of Agriculture gives the following facts regarding horses and mules in the United States:

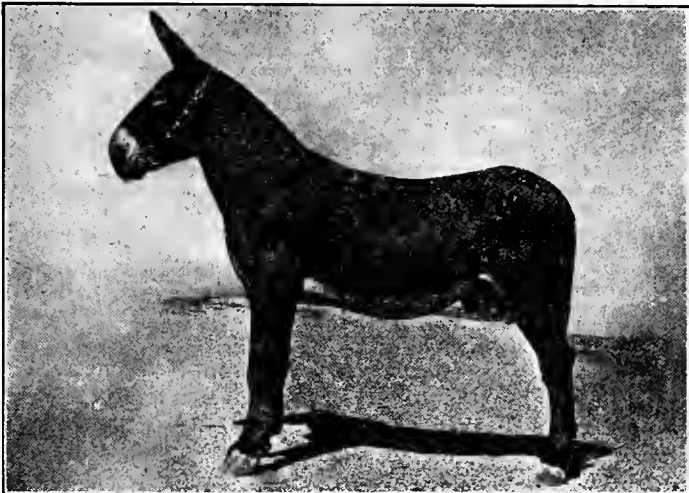
In 1867 there were 5,401,000 horses and 822,000 mules in this country, and in 1912 the number of horses had increased to 20,509,000, and mules to 4,362,000. The increase has been gradual. In 1902 there were 16,531,000 horses and 2,757,000 mules.

The price of a horse in 1867 was \$59.05, and a mule \$66.94, and in 1912 \$105.94 and \$120.51.

Kansas is about the only state in the Union that shows in loss of horses during the last year.

A GREAT JENNET JACK.

The *Live Stock and Dairy Journal*—Our big Missouri jack, Baby Giant, has again demonstrated that he is the greatest jennet jack in California and one of the best in the world. Recently Mamie McCord foaled a fine jack colt by Baby. This makes the ninth consecutive jack from ten jennets foaling. I think this record will be hard to beat, and if the husky sons of Baby Giant develop into as good individuals as their sire we will lead the State in jacks. All the other stock on Purebred Farm are doing nicely, and we are expecting some great things from our registered jennets next year. **PUREBRED FARM.** Santa Clara County, Cal.



Frenchy, First Prize Jack at California State Fair. Owned by M. A. Merrill, Willows, Cal.



A Pair of Typical Clydesdale Mares in Scotland.

A GOOD LOT OF HORSES.

J. Crouch & Son of Lafayette, Ind., who have a permanent branch stable at the Fair grounds, Sacramento, Cal., have a great lot of Percherons and Belgians for this season's sales. Their grand champion Percheron stallion, Jean Bart, is pronounced one of the best ever seen on the coast, and the entire lot is of uniformly good quality.

In Yorkshire Elect, Crouch & Son have one of the best Hackney stallions ever shown in the State. He is a magnificent chestnut of grand style and conformation, and perfect in action.

Their grand champion German coach stallion Ferro is another one of the good ones in their stable. Ferro is 5 years old, of good color and has great type and action.

THE CHURCHILL COUNTY, NEVADA, FAIR

A stranger traveling across the waste land from Hazen, Nev., would little think that within a few miles an abundance of everything desirable in the line of farm and garden truck was being produced.

The County Fair at Fallon was certainly a proof that with the help of the Truckee River many fertile farms can be made from the Land of the Sagebrush. While small grains were shown to some extent, the best collections at the fair were along the lines of vegetables, fruits, sugar beets and live stock.

The large number of entries speaks well for the community, both as regards quality of product and loyal interest, for no cash prizes were given. This did not seem to check the zeal at all, for the tables and shelves in the judging room were all full, and it was necessary to construct extra stalls to accommodate all of the animals.

Among the horses the Percherons seemed to be the most popular. The iron gray stallion belonging to Joe Frey received first, and a black belonging to Harmon & Austin received second. There was a large class of Percheron mares, and it was only

after considerable study that the first and second ribbons were awarded to mares belonging to Harmon & Austin. The Percheron colts also made a very good showing. Harmon & Austin receiving a blue ribbon and Mr. Leonard a red.

The Belgian stallion belonging to Charles Johnson, the French Coach stallion belonging to the Fallon French Coach Company, and the standard bred mare owned by James Brueher were excellent representatives of breeds and well worthy of their blue ribbons. The best mare and foal were Mr. Brueher's standard bred animals, while the second were Percherons owned by Harmon & Austin. Ed Harriman captured the blue ribbon for the best draft team, while the second place was given to Harmon & Austin.

The dairy cattle were well represented, both in quality and numbers, Holsteins and Jerseys being the most popular. The Jersey bull receiving the first prize was shown by A. L. Baker, the second belonging to F. F. Mobley. Mr. C. H. Hancock had the best Jersey cow, while a cow owned by Jim Young received second place.

The honors in the Holsteins were divided between Dr. Dunbar, who received two firsts, and G. W. Lattin, who received two seconds. F. Dietz showed some very fine Duroc-Jersey hogs and received first place for boar, sow and pigs. There was a good sized class of Berkshires, C. E. Kent winning first place for boar and sow and second for pigs. He also won two silver cups as prizes for grand champion boar and grand champion sow. W. W. Cogswell had second boar, Harmon & Austin second sow and Mr. Cogswell first for pigs under 6 months.

The one entry for Improved Chester White hog was not a good type of the breed, being too much like the bacon hog.

In sheep there was but one entry, that by N. Breman. Mrs. A. F. Sherman entered a pen of very good Angora goats.

The poultry exhibit was not as large as it should have been, considering the number of good flocks in and about Fallon. In most of the classes there was but one pair en-



J-A-C-K-S

I offer for sale ten head of Big, Heavy-Boned Young Jacks from 2 to 5 years old. Four of them prize winners. All ready for service and fully tested and guaranteed. I sell at home and employ no expensive agents. Come and see my Jacks whether you buy or not.

Jas. W. McCord

PHONE 471 J.

HANFORD, CAL.

JOHN TROUP, GOLETA, CAL.

IMPORTER OF CLYDESDALE, SHIRE AND PERCHERON HORSES AND REGISTERED CATTLE OF BEEF AND DAIRY BREEDS.

All Stock Sold at Reasonable Prices. Every Animal Guaranteed as Represented. Orders Executed on Commission. Reference, Commercial Bank, Santa Barbara, Cal.

Salvador Stock Farm

Napa, California

Headquarters For Shires



My winnings, given below, at the State Fair just closed:

- First and second 4-year-old stallion.
- First and second 3-year-old stallion.
- First 4-year-old mare.
- First 3-year-old mare.
- First 1-year-old mare.
- Grand champion stallion.
- Grand champion mare.

These winnings should convince anyone of the quality of my stock.

Write for prices, which you will find very reasonable.

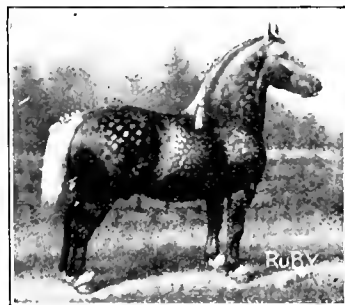
Henry Wheatley

A. C. RUBY, Portland, Ore.

C. W. BOWERS, Sacramento

RUBY & BOWERS

The Largest Horse Importers on the Pacific Coast



Percheron, Belgian, English Shire, Clydesdale, Hackneys and Coach Stallions and Mares.

We sell more imported horses than all other firms on the coast because we are direct importers and give a four-year guarantee which is good right at home. We have on hand at all times the largest and best lot of heavy draft stallions and mares, both American bred and imported, to be found any place in the West. If you are in the market for a high-class stallion or mare, don't fail to give us a call, as we can sell you more genuine horse for the money than any other importer in the business.

Barn: Sacramento, 13th Street, K and L.

Address: RUBY & BOWERS, CAPITAL HOTEL, SACRAMENTO, CAL.

Ruby & Bowers Have Imported More Horses Than Any Other Firm in the United States

tered, but though the exhibit was small there were some very good individuals, especially in ducks, White and Buff Rocks and turkeys.

On the whole the fair proved exceedingly interesting and educational. Every one seemed to enjoy himself, and the management is to be congratulated on their success.

ALAMEDA COUNTY FAIR.

As the Journal goes to press the first annual Alameda County Fair is in progress at Pleasanton, Cal.

A considerable amount of money was spent this year by the newly formed Fair Association upon new buildings for exhibits, and all exhibits had plenty of space, and the quarters for live stock were especially good. The weather was not favorable for a large attendance during the first days, but we trust that the last two or three days will equalize the somewhat light attendance during the first days.

Director William Bond of Newark made heroic efforts to secure large exhibits of live stock, and was successful in inducing owners of some of the best herds in the State to compete.

getting the bulk of the ribbons. For the first time since she freshened, Valet's Golden Biddy of Lockeford, the State Fair grand champion cow, was beaten for championship honors by Lemolla's Belle, a 3-year-old cow in the Locke herd.

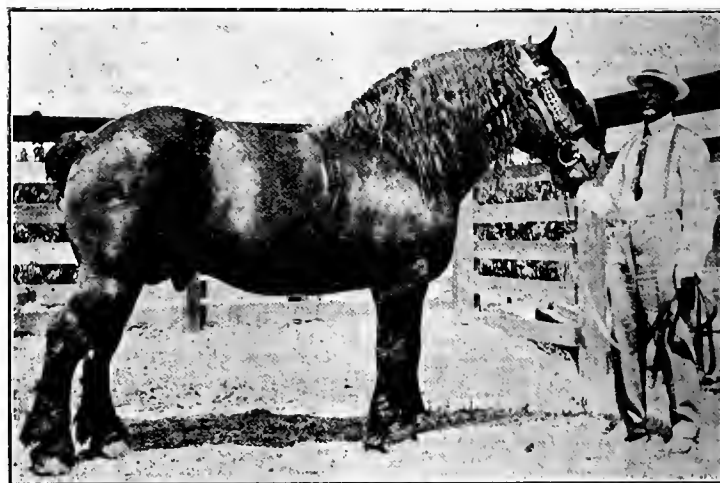
Mrs. Phoebe Hearst showed two registered Jersey bulls and a number of grade cows.

The Holstein breed was represented by the entries of H. B. Goecken of Livermore. The bull Aurich has developed rapidly in the past few months, and the same is true of the heifer Sunol Maid. Mr. Goecken has a number of calves by Aurich which will, no doubt, be seen on the fair circuit next year.

The Roone herd of O. I. C. swine was the largest exhibit in the swine classes, and contained a number of good individuals, there being one outstanding sow in the lot.

Howard Cattle Company and Bishop Brothers both showed Shropshire sheep, the Bishop flock having just returned from Spokane.

Riding and Driving Club of San Francisco were represented by a string of their good saddle horses and contributed largely to the entertain-



Merci, the Great Belgian Stallion Owned by Mercil Ranch, Modesto, Cal.

The hard work put in by the Directors this year should result in a much larger and better fair next year, as it seems as though the first year of any local or county fair is really a period of educating the residents of the locality up to the possibilities of the community if everyone will get out and boost.

The live stock at Pleasanton included some of the champions at the previous California fairs this year.

In the draft horse classes the Shires were the feature, both Henry Wheatley and Black Hawk Ranch being on hand with some of their best.

Neuadd Hillside was the winning Shire stallion in the 3-year-old and over class, although he had a worthy opponent for the honor in Anwick Athler, the Black Hawk entry.

Black Hawk Ranch showed four good Shire mares, winning in all classes. In the Percheron stallion classes William Bond's Inquiet registered a win over the many times winner Jean Bart. Inquiet is a magnificent black, who has sired some very promising colts on the Bond ranch, and as he is hardly more than a colt himself he gives promise of being a reliable getter of good ones.

In the beef cattle classes Howard Cattle Company and T. S. Glide again came together in the Shorthorn classes with awards about the same as at previous fairs this year. The Glide herd was in particularly good condition at Pleasanton after a short rest from showing.

In the dairy cattle classes Locke performed as usual with his Jerseys,

ment of the crowds, who saw the horse show and races.

The poultry exhibits were of good quality and satisfactory numbers, the most noteworthy exhibits being those of Twin Oaks Farm, Mrs. Bertha Hagedorn, William Hirsh and Stanisfield of Oakland.

ALFALFA MAXIMS.

(By Prof. L. R. Waldron, Superintendent Experiment Station, Dickinson, N. D., in "Dry Farming.")

1. Alfalfa must be inoculated.
2. Alfalfa cannot stand wet feet.
3. Alfalfa needs a well drained soil.
4. Alfalfa is a poor weed fighter the first season.
5. Alfalfa does not thrive when not cut.
6. Alfalfa should be cut when one-tenth in bloom.
7. Alfalfa should not be cut too late in the season.
8. Alfalfa roots go deep.
9. Alfalfa is the prince of drought resisters.
10. Alfalfa needs a deep, well packed seed bed.
11. Alfalfa does best on manured soil.
12. Alfalfa is best seeded without a nurse crop.
13. Alfalfa should be seeded with a drill.
14. Alfalfa should not be pastured until well established.
15. Alfalfa should not be pastured in the spring, when starting growth.
16. Alfalfa boards itself and pays for the privilege.

\$8⁵⁰ Buys The Best Horse Clipping Machine in the World



That's the price right at your dealer's for this wonderful Stewart Ball Bearing Enclosed Gear Machine.

Every horse should be clipped in season and this machine will do it easier and quicker than any other. Has all file hard cut steel gears, enclosed, protected and running in oil. A marvelous machine. Clips horses, mules and cows. Get one from your dealer or write for our complete catalogue. Send a postal today.

CHICAGO FLEXIBLE SHAFT COMPANY
737 LASALLE AVE. Chicago



THE NEVADA STATE FARM.

One has but to see the Nevada State Farm to realize how much credit is due Professor True and his assistants for the fine specimens of cattle, horses, sheep and hogs they have exhibited at our State Fairs.

The land is rolling and is not easy to irrigate properly, and the climate is so severe that but two good crops of alfalfa can be produced each season.

Their live stock is the result of hard work and perseverance. They won many prizes in the show ring without having a large number of animals to select from. They have no poor individuals, and many are extra good. With what they have now as foundation stock, by careful selection, they will soon be able to hold their own in any show. The university and farm are situated in the outskirts of Reno, and are but a few minutes' walk from the depot. They haven't many large buildings, but are gradually getting fixed up, and in a few years will have things in fine shape.

G. A. MURPHY.

HUNTLEY FARMERS WANT ALFALFA MEAL MILL, CREAMERY AND CANNING FACTORY.

The settlers on the Huntley irrigation project in Southern Montana want an alfalfa meal mill, a creamery and a canning factory. A large number of the farmers are trained business men and quick to adopt advanced agricultural methods. The main crops at the present time are alfalfa and sugar beets. The beets are shipped to the factory in Billings, twelve miles away, the sugar company having established seven beet dumps at convenient points along the railroad lines that traverse the irrigable lands. The large acreage in alfalfa would insure a capacity supply for an average size meal mill, which should prove a very profitable industry in this location. Two transcontinental lines of railroad traverse the entire length of the project, and the demand for alfalfa meal for many years will be greater than the supply.

Many of the settlers are eager to plant a larger acreage in beans, peas, tomatoes, pumpkins and other vegetables suitable for canning. There are several small towns in the heart of the 30,000-acre irrigated tract where small fruits and vegetables produce abundant crops of delicious flavor. Small fruits, such as strawberries, raspberries and blackberries, are unusually prolific in that section.

Dairying is one of the most profitable industries on the project, although so far the settlers are obliged to ship their cream to Billings. There are now a sufficient number of cows on the land that would be pledged to a new creamery to insure its success.

Inquiries should be addressed to the Project Manager, U. S. R. S., Huntley, Mont.

PORTLAND UNION STOCK YARD.

The report of the Portland Union Stock Yards for the month of September shows the following:

Cattle—Receipts for month, 7115, a decrease of 1080 compared with the same month last year. Receipts for year to date, 59,854, a decrease of 11,292, compared with last year to same date.

Calves—Receipts for month, 227, a decrease of 646. Year to date, 2351, a decrease of 2655.

Hogs—Receipts for month, 9984, an increase of 2536. Year to date, 71,648, an increase of 13,355.

Sheep—Receipts for month, 20,647, a decrease of 9007. Year to date, 187,162, a decrease of 50,928.

Receipts from California for September were—Cattle, 269; calves, 4; hogs, 2838.

LAFAYETTE STOCK FARM

J. CROUCH & SONS, Props.,

LAFAYETTE, INDIANA

OUR GREAT IMPORTATION



Of Percheron, Belgian, Hackney and German Coach Stallions has arrived at our stable. The choicest lot of high-class stallions ever brought to America.

Large numbers of them First, Second and Third Prize Winners at the French and Belgian Shows this year. No other importer has ever made such a wonderful record for prize winners in the European shows.

At California State Fair, 1912, our Stallions won Eight Firsts, Three Seconds and Three Thirds, Four Championships and One Grand Championship.

If you are going to buy a Stallion come now while you can get a good selection and at very close prices.

Permanent Stable at State Fair Grounds, Sacramento, California.

J. F. CAMPBELL,

PHONE CAPITAL 31.

MANAGER.

Imported Shires

We offer for sale young mares and stallions from some of the best stock in England. Ages range from 1 to 4 years. These are all good individuals, and every one is absolutely sound. We also have saddle horses and driving stock for sale.

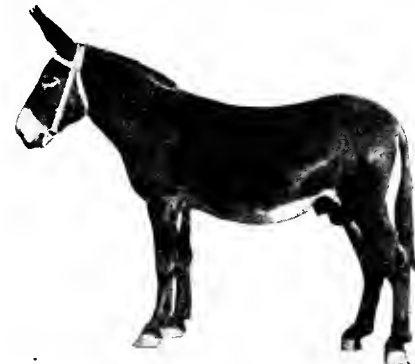
Correspondence and inspection of stock invited.

BLACK HAWK RANCH, :: Burlingame, California

PHONE 131.

A. W. WARD, Superintendent

JACKS and JENNETS

20
JACKS22
JENNETS

I am back at my old location at the Stockton Fair Grounds, with the best lot of Jacks and Jennets ever seen in one lot on the Pacific Coast.

The Jacks are all black with white points, range in age from 3 to 7 years, and all but two are over 15½ hands, standard measure, several reaching 16 hands and two 16 hands and 1 inch.

PRICES RANGE FROM \$1250 UP, AND THEY WILL BE SOLD WELL WORTH THE MONEY AND UNDER MY USUAL GUARANTEE, WHICH IS WITHOUT DOUBT THE BEST GUARANTEE PRINTED OR GIVEN TODAY WITH ANY CLASS OF BREEDING STOCK IN THE UNITED STATES, AND MY GUARANTEES ARE ALL MADE GOOD TO THE LETTER.

I also have on hand a carload of the best Registered and Pedigreed Jennets possible to procure. They are of the large, heavy boned type which raise the premium Jacks, such as can be seen in the lot advertised above. Money will not buy better ones.

My one aim is to have none but the very best, either in Jacks or Jennets, as the best is the only kind I believe in having, or upon which I will put my name to a guarantee, and they are the only kind which will advance the breeding of the best purebreds in California.

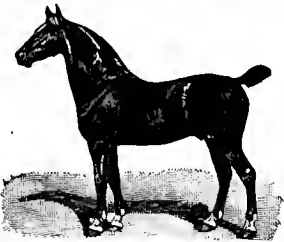
H. B. THORNBERRY

STOCKTON, CALIFORNIA

P. O. BOX 679

Permanent Stables at Stockton Fair Grounds

Warranted to Give Satisfaction.

Gombault's
Caustic Balsam

Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Hummer Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.

MINNEWAWA STOCK FARM

Four
Registered Percherons

Stallion and three mares. Not akin. Colts from all shown. Price for the bunch, \$4,000.

M. E. Sherman, Fresno, Cal.



J. L. MCCARTHY
LIVE STOCK AND REAL
ESTATE AUCTIONEER

Fifteen years experience
at Chicago, St. Louis
and Kansas City Stock
Yards. Country sales
a specialty. Address
Key Route Hotel
Oakland, Cal.

Horses, Mules & Shetland Ponies

I both buy and sell mules and horses. Have on hand at all times mules to hire in carload lots. Also breed Shetland Ponies, and have several weanling colts and a few well broke ponies for sale.

J. L. MENDENHALL.
WILLIAMS, CAL.



Jack Rogers 4576

Won First Prize at State Fair in 1911 in saddle class, 2 years and under 3, and also won second in combination ring among aged horses. He fills the eye of lovers of good horses. I stand him at the low sum of \$20.

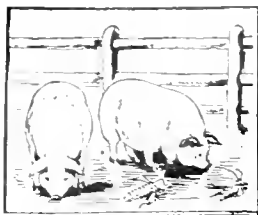
Also Col. Rogers (3287) at the same price.

Their colts will sell at sight to any one wanting a fine saddle colt.

J. T. RAGSDALE

Breeder and Trainer of Five-Gaited
Saddle Horses.

MERCED, CALIFORNIA.



THE SWINE HERD



Poland Chinas

I offer for sale fifty fine pigs farrowed in June and July.

W. Bernstein

HANFORD, CAL.

DUROC JERSEY BOARS

Sired by Our Grand Champion Boar at California State Fair.

H. P. SLOCUM & SONS.

R 1. GLENN, CAL.

MULEFOOT HOGS

Prolific and hardy. Try one of our Boar Pigs and you will be satisfied. Have some pure blooded pigs. Have also a few half-bloods at reasonable prices. Orders and inquiries receive prompt attention.

BRYANT BROS.

Lemoore, California

HILLMONT FARM

High-Class Registered

BERKSHIRE HOGS

Write for Information or Come and See.

CHAS. GOODMAN, Williams, Cal.

Knob Hill Stock Farm

REGISTERED POLAND CHINA SWINE

Stock of Various Ages, Both Sexes For Sale

A. M. Henry, Proprietor Farmington, Cal.

S. B. WRIGHT

SANTA ROSA, CAL.

BERKSHIRE HOGS, DORSET SHEEP TROTTER HORSES

Breeder of Sonoma Girl 2:05 1/4
Charley Belden 2:08 1/4, etc.

Farm 2 miles west of Santa Rosa on the Electric Railroad. Fare, 5 cts.

BERKSHIRES

Registered Stock. Bred for Size and Quality.

A few bred sows and some young boars for sale at right prices.

Also have for sale a few Registered Shorthorns of both sexes. Correspondence solicited.

H. L. MURPHY, PERKINS, CAL.

SIZE AND PROLIFICACY.

Taking it for granted that these are the most important qualities in any breed of swine, and to my mind one is just about as important as the other, should not the latter carry more weight than it now has in the judging?

At our State Fairs we can show size at maturity, or for a range of ages, but the other quality is absolutely unrepresented. In fact, a sow with a good litter is at a decided disadvantage, because she has to sacrifice condition for the litter.

The question is, can we not have the brood qualities carry more importance? Any sow can be gotten into condition, but every sow will not raise a good litter.

I have heard prominent breeders say, "Well, they must be fat or the judge will throw them out." That is admitting that the breeder is breeding for the judge rather than the judge judging for the breeder.

The sow that has had several good

THE HERD BOAR.

The most abused animal on the farm is the herd boar. Many farmers purchase a purebred boar that has been well developed, in heavy flesh, then turn him out with a lot of sows so that he is kept so busy that he doesn't have time to hunt his living with the test.

If the boar is to be turned out he should be fed by himself night and morning—enough to keep him in a vigorous condition. It is the well-conditioned boar that brings large litters of strong, vigorous pigs.

Some go to the other extreme and keep them too fat, and at the same time deprive them of sufficient exercise to keep them active.

Don't wait until the sows are ready to breed, for then if you happen to buy one rather young you are apt to overwork him on the start so that he will be stunted or become impotent.

When buying a boar select one from a good breed that is a good individual.



Nebraska Sensation. Typey Head of J. Frank Smith & Son's Herd of Duroc-Jerseys. Hanford, California.

litters certainly, from the standpoint of what makes for the advancement of the breed, should have the preference over an equally good type which lacks the brood qualities. It strikes me, if this is not the case, we miss one vital point in the improvement of purebred stock, and a most important point at that. Let the record count.

KENNEDY BROTHERS.

Merced County, Cal.

The Live Stock and Dairy Journal—At the recent Santa Clara County Fair I had entries of twelve head of Duroc-Jerseys and won nine firsts, three seconds and three sweepstakes.

I wish to report the sale of my first prize gilt at Sacramento in 1911. Peoria Bell (282308). I also recently sold Golden Duke (38987), a young gilt, Peoria Bell 2d, and a litter of six pigs out of Peoria Bell and sired by Golden Duke, all to J. E. Thorp of San Joaquin County. All of these were prize winners at Santa Clara County Fair.

J. A. CONNER.

Santa Clara County, Cal.

A sow will sometimes kill her pigs because she has not had enough protein food. This trouble may be overcome by proper feeding before farrowing.

al. Be particular about the feet, legs, back and ability to respond to good feeding. Have a short pug nose if possible, but do not sacrifice body or bone for head. With a short head on your boar it is not necessary to be as particular about the heads of the sows. Some of the long-nosed sows are extra good mothers.

Treat the boar well, and do not make him cross, as a cross boar may catch you unawares.

Cut off the tusks to prevent other hogs being injured.

G. A. MURPHY.

PREPARE FOR 1915.

The live stock show of the Panama Exposition at San Francisco promises to be the largest ever held on the coast. Every breeder of purebred stock of all kinds should be selecting his material, to breed winners from, and making plans for their proper development. The prizes will be liberal, so any one with good animals well fitted will come out ahead of his expenses.

The American Berkshire Association will offer an addition of several thousand dollars to the Berkshire prizes. This should bring out the best show of Berkshires ever known.

Competent persons have the management of the live stock department, and preparations are being made to

Swineland

FARM

Duroc-Jersey-Tamworth and Berkshire Swine

2 Gold Medals
2 Silver Medals
4 First Premiums
2 Second Premiums
at the
California State Fair

We offer first-class Boars ready for service and fall pigs.

Swineland Farm

Yuba City, California

RED DUROC HOGS

Best Bred Stock Now in California

YOUNG STOCK AND SERVICE BOARS AND SOWS FOR SALE

All registered pure-breeds, and from such sires as Wonder and Klondike. New Importations from Missouri and Indiana. We are located in the Imperial Valley, and are here to supply California, Oregon and Arizona breeders. Write for prices and pedigrees to

MOORE BROS.,

Box 202, El Centro, Imperial Co., Cal.



Recorded Mule Footed Hogs are very prolific as well as less susceptible to Swine Diseases. Their great vitality, large litters and quick growth make them the coming hog. JOHN H. DUNLAP, Box 499, Williamsport, Ohio.

Roselawn Stock Farm

WOODLAND, CAL.

BREEDER OF SHORTHORN CATTLE, POLAND CHINA HOGS, SHROPSHIRE SHEEP

T. B. GIBSON

Proprietor

SALE NOTES.

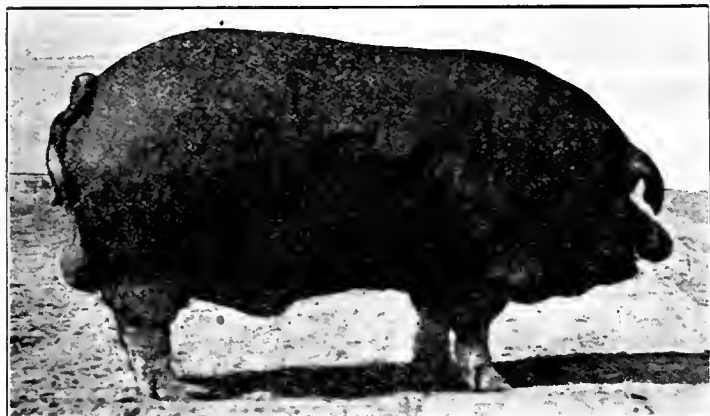
care for the exhibits in an up-to-date manner. I would like to see every Berkshire breeder of California an exhibitor of at least one animal. The small breeder has a better chance to have one extra good one than the large breeder.

If fifty breeders will show a few of their best, most of the prize money will remain in California. We can develop better show stock in California than they can in the East if we give them the same care they do there. We do not have the cold winters to check the growth. Our hogs can grow every day.

G. A. MURPHY.

The Live Stock and Dairy Journal—I enclose draft for subscription to your excellent paper for one year. I have enjoyed the sample copies sent me very much, and will look forward to much pleasure and profit during the coming year. I am going to raise Berkshires of a high order. Have just had a fine litter farrowed out of Nevada's 82d (160310), by Grand Master Lee (115535), so you see what class I expect to breed. W. S. PARK, Nevada.

N. H. Locke Co., Lockeford, Cal., sold to A. Lavinge, Lemoore, Cal., the registered Jersey bull, Adelaide's Gertie Son of Lockeford. He is sired by Gertie's Son, and out of Golden Adelaide Smith.



H's Big Bone, First Prize Two Years and Over Poland China Boar at California State Fair. Owned by A. M. Henry, Farmington, Cal.

COPY OF STATEMENT TO U. S. POSTAL DEPARTMENT.

In accordance with the provisions of the Act of Congress, August 24, 1912, we publish the following copy of statement made by us to Third Assistant Postmaster-General:

Owner of **The Live Stock and Dairy Journal** is Agricultural Publishing Company, Sacramento, California.

Managing Editor, R. D. McFarland, Folsom, California.

Business Manager, C. L. Hughes, Sacramento, California.

Stockholders of Agricultural Publishing Company holding 1% or more of capital stock:

R. D. McFarland, Folsom, California.

C. L. Hughes, Sacramento, California.

Victor E. Kohler, Sacramento, California.

Known bondholders, mortgagees and other security holders holding 1% or more of total amount of bonds, mortgages or other securities:

California National Bank, Sacramento, Cal.

(Signed):

AGRICULTURAL PUBLISHING CO. By C. L. HUGHES, Secretary.

Sworn to and subscribed before me this 9th day of October, 1912.

H. F. G. WÜLF, Notary Public.

J. R. Kelly, Mesa, Ariz., recently sold the imported Guernsey cow, Marion of Culmor, to University of Nevada, Reno, Nev. This cow represents some of the best blood lines of the breed, and is herself an individual of high excellence, whose only drawback in the show ring this year was a slight lack of condition. She is sired by Imp. Cora's Governor of the Shene, and out of Sweet Marie of R. This selection by Professor True appears to be in keeping with his usual keen selection of good individuals.

Kings County, Cal., swine are finding favor with Oregon breeders, two lots having been shipped out during the first weeks of October. M. Bassett of Hanford sent out some of his noted Poland Chinas, while J. Frank Smith & Son made a shipment of Duroc Jerseys. The Smith boar, Nebraska Sensation, is siring some great pigs, and is coming fully up to expectations.

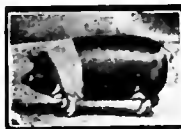
G. A. Murphy, Perkins, Cal., recently delivered three Shorthorn bulls and one Berkshire boar to Antelope Val-

ley Land and Cattle Company, a corporation, backed by a number of well-known Nevada capitalists.

George A. Smith, Corcoran, Cal., sold five head of imported Shire mares and four colts to James W. McCord, Hanford, Cal., during Hanford fair week. As noted elsewhere in this issue, this is a remarkably good lot of Shires. At the Hanford Fair they were looked over by an English judge of Shires, and he states that two of the mares, March Matchless and Turutree Damsel, are two of the best mares which ever left England.

Paul Eisenberg of Hawaii recently purchased from N. H. Locke Co., Lockeford, Cal., the Jersey bull, Buttercup's Valet of Lockeford, a prize winner in the junior yearling class at the California State Fair. Mr. Eisenberg also purchased from W. J. Hackett, Ceres, Cal., a good young Jersey bull and one Jersey heifer.

R. R. Cartwright of Angels Camp, Cal., was a recent visitor at the Journal office. Mr. Cartwright was on his way to make delivery of the last of three Red Polled bulls, which he recently sold to three different stockmen in the Sacramento Valley. These bulls will be used on stock cows.



FOUR OAKS STOCK COMPANY

Woodland, California

BREEDERS OF BERKSHIRE, HAMPSHIRE AND POLAND CHINA HOGS.

Of the Very Best Strains.

Our Herd Boars are Artful Masterpiece (110970), by Masterpiece (77000), and Ravenwood Longfellow 10th (136430), by Longfellow's Rival 5th (121891). Our sows are of equal breeding and merit. Come and see for yourselves. Twenty-two trains pass our door on the Sacramento and Woodland Electric Railroad every twenty-four hours. Stock for sale at all times.

DUROC JERSEYS AT MODESTO

BOARS, SOWS AND YOUNG STOCK FOR SALE.

Registered Duroc Jerseys. No better anywhere. Write for prices. Stock for immediate delivery. Address:

JOHN P. DAGGS

BOX 5, R. F. D. 5 (One Mile North of Town),

MODESTO,

BERKSHIRES

A grand lot of richly bred pigs of sexes for sale. Express prepaid. A lot of good service boars offered cheap.

A few tried and proven brood sows and bred gilts priced to sell. Satisfaction guaranteed. Write us your needs.

WEAVER STOCK FARM, BRAWLEY, CAL.

REGISTERED

POLAND CHINA SWINE

PRIZE WINNERS

Finest Stock in the State from \$30 up

M. BASSETT, Breeder

HANFORD, CAL.



SUNNY SIDE STOCK FARM BERKSHIRES

My herd contains more Champions, more Descendants of Champions and more Parents of Champions than any other herd on the Pacific Coast.

G. A. MURPHY, PERKINS, SACRAMENTO COUNTY, CAL.

BELLA VISTA STOCK RANCH

GUERNSEY CATTLE. HAMPSHIRE SWINE.

Registered Purebreds of Both Sexes for Sale.

J. W. HENDERSON,

503 First National Bank Bldg., Berkeley, Cal.

Quality Berkshires

Oak Grove Berkshires are the large, growthy, vigorous, money-making type. They carry the blood of Masterpiece, Black Robinhood, Silver Tips, Premier Longfellow and Empress, names that mean quality wherever Berkshires are bred.

We are able to quote you the best Berkshires at the cheapest prices.

Further information cheerfully given.

Oak Grove Dairy Farm, Woodland, Cal.

Continued from page three.

this year to the Rambouillet entries of Charles A. Kimble. Mr. Kimble showed a number of big, well-covered ewes and rams. One ewe was especially good, being a typey individual carrying a fine nine-inch fleece of great quality, and covered right down to the ground. We also noted a particularly fine ram of exceptional size and quality.

The poultry exhibit was probably the best ever shown in the county, and is all the more creditable because most of the stock was exhibited by Kings County breeders.

The awards follow:

PERCHERONS.

Exhibitors—E. R. Montgomery, Hanford; A. S. Luis, Hanford; William Sagarer, Hanford; Louisa Parks, Laton; Ruby & Bowers, Sacramento; J. A. Beall, Laton.

Stallions 4 years and over—First, Sagarer; second, Luis; third, Montgomery.

Stallions 3 years and over—First, Ruby & Bowers.

Stallions 2 years and over—First, Ruby & Bowers.

Stallions 1 year old—First, Beall.

Champion stallion—Entry of Sagarer.

Mares 4 years and over—First, Beall; second, Parks; third, Beall.

Mares 3 years and over—First, Parks.

Mares 2 years and over—First, Beall.

CLYDESDALES.

One stallion award to Ruby & Bowers, Sacramento.

SHIRES.

All mare awards to James W. McCord, except yearling award made to S. E. Railsbach and Charles Kimble.

Shire stallions—First and champion, entry of Railsbach and Kimble; second, Ruby & Bowers, Sacramento.

Cows 3 years and over—First, Myslie's Sequel, Glide.

Cows 2 years and under 3—First, Greenwood Queen, Glide; second, Greenwood Bride, Glide; third, Luella of Valley View, Glide.

Senior yearling heifers—First, Bapton Queen, Howard; second, College Lady, Howard.

Junior yearling heifers—First, Luella Lancaster, Glide; second, Hillcrest Lady, Glide; third, Archeress 24th, Howard.

Senior heifer calves—First, Countess Churchill, Howard; second, Winsome Countess, Howard; third, Hopeful Countess, Howard.

Junior heifer calves—First, Lady Perfection, Glide; second, Lustrous, Howard; third, Viscount Grenada, Howard.

Senior and grand champion cow—Greenwood Queen, Glide.

Junior champion cow—Bapton Queen, Howard.

Get of sire—First, get of King Edward, Glide; second, get of Straight Archer 11th, Howard; third, get of Knight's Perfection, Glide.

Produce of dam—First, Produce of Lancaster Bride, Glide; second, Howard; third, Produce of Luella of Valley View, Glide.

Aged herd—First, Glide.

Breeder's young herd—First, Howard.

Calf herd—First, Howard.

HEREFORDS.

Exhibitors—Simon Newman Co., Newman, Cal.

Bulls 3 years old and over—First, Young Donald.

Yearling bulls—First, Finished Goods; second, Early Goods.

Cows 3 and over—First, Pride of Humboldt 15th.

Cows 2 and under 3—First, Lenora B.; second, Sweet Lass.

Yearling heifers—First, Sugar Plum; second, Newman Special.

Heifer calves—First, Singmistress; second, May Queen.

Champion bull—Young Donald.

Grand champion cow—Lenora B.



Hampshire Sows at Bella Vista Ranch, Martinez, Cal.

BELGIANS.

Stallions 4 year and over—First, Ruby & Bowers, Sacramento.

Stallions 3 years old—Entry of Montgomery & Barnett.

Stallions 2 years old—Entry of Ruby & Bowers.

GRADE DRAFT HORSES.

Mare 2 years old—First, E. R. Montgomery.

Mare 3 years old and over, first and third; gelding 2 years and under 3, second and third; mare 1 year and under 2, second; gelding 1 year and under 2, first; mare under 1 year, first; stallion 1 year, third; mare 1 year, second, M. Eastsett, Hanford.

Mare 3 years old and over, second, Geo. A. Smith, Hanford.

FARM HORSES.

Two-horse team, first and second; four-horse team, first, J. W. McCord.

JACKS, JENNETS AND MULES.

Jack 2 years old, first, Frank Keller.

Jack 4 years old and over, third; jack 3 years old and over, first; jack 2 years old and over, second, J. W. McCord.

Jack 3 years old and over, first and second, F. M. Frazer.

Mule 2 years old, second and third; mule colt under 1 year, third; jack 2 years old, third; jack 4 years old, second; jennet 3 years and over, first, second and third, John Burrell.

Mule 2 years old, first and champion; pair shown in harness, first, W. R. Clark.

SHORTHORNS.

Exhibitors—Howard Cattle Co., San Francisco; T. S. Glide, Davis, Cal.

Bulls 3 years old and over—First, King Lancaster 2d, Glide; second, Straight Archer 11th, Howard.

Bulls 2 years old—First, Greenwood Knight, Glide.

Senior yearling bulls—First, College Count 2d, Howard.

Junior yearling bulls—First, Clara's Knight, Glide; second, College Count 5th, Howard.

Senior bull calves—First, Hillcrest King, Glide; second, College Count 11th, Howard; third, Archer's Junior, Howard.

Junior bull calves—First, Greenwood King, Glide.

Senior and grand champion—King Lancaster 2d, Glide.

Junior champion—Clara's Knight, Glide.

JERSEYS.

Exhibitors—N. H. Locke Co., Lockeford, Cal.; R. L. Waltz, Hanford, Cal.; George A. Smith, Corcoran, Cal.

Bulls 3 years and over—First, King's Valet, Locke; second, Ruth's Golden Glory, Waltz.

Bulls 2 and under 3—First, Margold Fox of Lockeford, Lee; second, Grace's Fox of Venadera, Locke.

Yearling bulls—First, Valet's King of Lockeford, Locke; second, Foxy King of Lockeford, Locke; third, Kitty's Valet of Lockeford, Locke.

Bull calves—First, Leda's Golden Ladie of Lockeford, Locke; second, Valet's Journalist of Lockeford, Locke; third, entry of Smith.

Grand champion bull—King's Valet, Locke.

Cows 3 years and over—First, Lemolla's Belle, Locke; second, Victor's Lady Rose, Waltz.

Cows 2 years and under 3—First, Valet's Golden Biddy of Lockeford, Locke.

Yearling heifers—First, Financial Prospect of Lockeford, Locke; second, Golden Rosebud of Lockeford, Locke.

Heifer calves—First, Valet's Handsome Lemolla of Lockeford, Locke; second, Valet's Bright Eyes of Lockeford, Locke.

Grand champion cow—Valet's Golden Biddy of Lockeford, Locke.

Aged herd—First, Locke.

Breeder's young herd—First, Locke.

Get of sire—First, get of King's Valet, Locke.

Produce of dam—Produce of Golden Biddy, Locke.

HOLSTEIN-FRIESANS.

Exhibitors—Ed Bryant, Lemoore; G. U. Clark, Hanford; Floribel Land and Cattle Co., Hardwick; T. J. Gilkerson, Stratford, Cal.; Mrs. T. J. Gilkerson, Stratford; Robert Kimble, Hanford.

Bulls 3 years and over—First, Meg o' the Mist Legend, Clark.

Bulls 2 years and under 3—First, Sir Segs Hengerveld De Kol, Gilkerson; second, entry of Ed Bryant.

Yearling bulls—First, Prince Beauty Pietertje Segs, Floribel; second, entry of Ed Bryant; third, entry of Clark.

Bull calves—First and second, Gilkerson; third, Floribel.

Senior and grand champion—Meg o' the Mist Legend, Clark.

Junior champion—Prince Beauty Hengerveld Segs, Floribel.

Grape Wild Farm ^{Herd of} Berkshires

Herd headed by:

Double Premier (88215), a son of Premier Longfellow.

Mayhews Masterpiece (134906) and Grape Wild Master (134907), both sons of Masterpiece (77000).

Superior Star (145224), a son of Berryton Duke, Jr.

The sows in the herd are equally as well bred.

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I have for sale pigs of both sexes sired by my boar, Great Prospect (57949) out of sows sired by A. Wonder. For prices write or call.

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DUROC Jersey Swine

Pure Bred and Registered

Young stock of both sexes for sale, sired by Junior 1st (121831), who is the sire of my young herd which won the Duroc Jersey Association Special Prize at the 1912 California State Fair.

Write for pedigrees and prices.

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R. 2.

TURLOCK, CAL.

FOR SALE—The Herd Boar

Artful Star Master 2d (139,843)



Farrowed April 2, 1909. Out of Premium Alexis 2d (194723), by Star Master (97071), out of Ulah Star (59992), by Masterpiece (77000). Premier Alexis 2d, out of Alexis Belle 44th (104296), by Artful Premier (55555).

Artful Star Master 2d is a smooth boar of great bone, vitality and conformation.

For Further Information, Address

GREENFIELDS FARM, Klamath Falls, Ore.

Cows 3 years and over—First, Trixie Irona De Kol, Floribel; second, Mary Pontiac Wayside, Floribel.

Heifer calves—First, May Oak De Kol 2d Homestead, Kimble; second, entry of Robert Kimble; third, unnamed daughter of Trixie Irona De Kol Floribel.

Senior champion cow—Trixie Irona De Kol, Floribel.

Junior and grand champion cow—May Oak De Kol 2d Homestead, Kimble.

Get of sire—First, entry of Mrs. Glickerson; second, entry of Clark.

Produce of dam—First, entry of Mrs. Glickerson; second, entry of Clark.

Calf herd—First, entry of Robert Kimble.

Exhibitors—R. R. Cartwright, Angels Camp, Cal.; G. L. Cartwright, Angels Camp, Cal.

Bulls 3 years and over—First, Tom Roy, R. R. Cartwright; second, Wendel Heil, G. L. Cartwright.

Bulls 2 years and under 3—First, Billy Roy, R. R. Cartwright.

Yearling bulls—First, Sam Roy, R. R. Cartwright; second, Reuben Heil, G. L. Cartwright.

Bull calves—First, Duke, G. L. Cartwright; second, Red Cloud, R. R. Cartwright.

Senior champion—Tom Roy, R. R. Cartwright.

Junior champion—Sam Roy, R. R. Cartwright.

Grand champion—Tom Roy, R. R. Cartwright.

Cows 3 years old and over—First, Lettie, R. R. Cartwright; second, Hattie, R. R. Cartwright; third, Rena, G. L. Cartwright.

Cows 2 years and under 3—First, Mary Davyson, R. R. Cartwright; second, Lucille, G. L. Cartwright.

Yearling heifers—First, Nora Davyson, G. L. Cartwright; second, Rosy Dean, R. R. Cartwright; third, Louise, R. R. Cartwright.

Heifer calves—First, Daisy Laura, R. R. Cartwright; second, Baby Reene, G. L. Cartwright.

Aged herd—First, R. R. Cartwright; second, G. L. Cartwright.

Breeder's young herd—First, G. L. Cartwright.

Get of sire—First, R. R. Cartwright.

Produce of dam—First, R. R. Cartwright; second, G. L. Cartwright.

THE STANISLAUS COUNTY FAIR.

The Stanislaus Agricultural, Live Stock and Dairy Exposition, held at Modesto, Cal., early in October, was a very successful County Fair, of which the live stock department was a prominent feature.

The entries emphasized the importance of Stanislaus County as a purebred stock center. The classes in Holstein and Jersey cattle were particularly well filled, and keen competition brought out some individuals of exceptional merit.

D. B. Thompson filled the important position as superintendent of the live stock department to the entire satisfaction of all concerned.

The stock was judged by C. R. George of the University Farm, who gave some instructive talks from the ring at intervals during the placing of the ribbons.

The complete list of live stock awards follows:

Horses.

Percherons—Aged stallions, first, J. W. Ensinger; second, West Side horse, and third, W. M. Kirkland.

Belgian stallions—Merci, owned by Merci Stock Ranch, first.

Families of colts—Merci entry first; D. B. Thompson second.

Best 3-year-old colts—W. M. Kirkland, first; M. McCleary, second, and Seth Moon third.

Two-year-old colts—A. H. Ball first; D. B. Thompson, second; Seth Moon, third.

Yearling colts—Merci Ranch, first; J. W. Benoit, second.

Brood mares—J. W. Benoit, first; Merci Ranch, second and third.

Jersey Cattle.

Aged bulls—L. J. Dobler, first; C. H. Bonham, second; Rancho Dos Rios, third; F. C. Vail, fourth.

Two-year-old bulls—Guy Miller, first; C. H. Bonham, second; G. O. Hillier, third.

Yearling bulls—Rancho Dos Rios, first and second.

Aged cows—Guy Miller, first, second and third.

Two-year-old cows—G. O. Hillier, first and second.

Yearling heifers—Hillier, first; Hackett, second and Hillier third.

Heifer calves—First and second, Rancho Dos Rios; third, Hatch.

Jersey calf herd—Rancho Dos Rios, first; Hackett, second.

Grand champion bull—Guy Miller; reserve champion, L. Dobler.

Grand champion cow—Guy Miller; reserve champion, G. O. Hillier.

Holstein Cattle.

Aged bulls—A. B. Kendall, first; H. E. Cornwell, second.

Two-year-old bulls—B. F. Anderson, first.

Yearling bulls—J. W. Benoit, first; H. B. Cowan second, and J. A. Palander third.

Bull calves—First, Merci Ranch; second, H. E. Cornwell; third, A. B. Kendall.

Aged cows—First, H. B. Cowan; second, J. A. Palander; third, G. F. Anderson.

Two-year-old cows—First and second, H. E. Cornwell; third, H. B. Cowan.

Yearling heifers—H. E. Cornwell, first.

Heifer calves—H. E. Cornwell, first and second; B. F. Anderson, third.

Grand champion bull—A. B. Kendall; reserve champion, J. W. Benoit.

Grand champion cow—H. B. Cowan; reserve champion, H. E. Cornwell.

Swine.

Poland China boars under 6 months—A. M. Henry, first and second; J. Tupper, third.

Poland China sows over 1 year—A. M. Henry, first and second; J. Tupper, third.

Sows over 2 years—A. M. Henry, first; C. N. Odell, second.

Sows under 1 year—A. M. Henry, first, second and third.

Sows under 6 months—J. Tupper, first, second and third.

Sows with six pigs—Henry first; Steffy, second.

Poland China champion boar and sow—A. M. Henry.

Best Poland China herd—A. M. Henry.

The Berkshire awards for all classes were won by E. L. Newell. J. P. Daggs won all prizes in the Duroc Jersey classes and R. A. East won all in the O. I. C. classes.

Milking Contest.

The results of a two-day milking contest were as follows:

Mature class—

Xatacco, Holstein, J. Palanda, owner, 142.30 pound milk, 3.60 pounds fat; Nydia, Holstein, J. W. Benoit, owner, 127.75 pounds milk, 3.33 pounds fat; Golden Tina, Jersey, W. J. Hackett, owner, 74.45 pounds milk, 3.03 pounds fat.

Three years old and under—

Faith of Klondyke, Jersey, D. B. Thompson, owner, 75.05 pounds milk, 2.86 pounds fat; Senorita Machilda, Holstein, H. G. Cornwell, owner, 73.90 pounds milk, 2.12 pounds fat.

Poultry Show.

The poultry exhibit spoke well for the county, as the show was made up entirely of home birds. The department was in charge of J. D. Yates, and the ribbons were placed by J. V. Moore of Oakland.

The official Ayrshire record No. 14 shows a new year's record for 2-year-olds. White Lily of South Farm made 12,022 pounds of milk, 503.88 pounds of butter-fat, equal to 588 pounds of butter, the average per cent of fat being 4.19. This is the highest of advanced registry 2-year-olds in this country, and second highest 2-year-old record of the world.

SALE NOTES.

Four Oaks Stock Company, Woodland, Cal., recently shipped one of their good young Berkshire hogs to Salt River Valley, Arizona. This hog will be placed at the head of a small purebred herd.

Ruby & Bowers have made numerous sales of stallions since the State Fair, having disposed of a carload in a short time. Two recent sales were that of a Hackney at Kerman and a 3-year-old Percheron at Hanford.

Frank Reed Sanders, Mesa, Arizona, has sold to a new Oregon breeder, P. L. Prenitt, the grand champion Dutch-Belted bull, David's Echo Lad, the 3-year-old cow, Bella of the Rancho, the 2-year-old, Hensje of Valley Farm, and one other heifer of the good Sanders breeding.

RECORD PRICES.

Prime steers recently sold in Chicago at \$10.40 per hundred weight, setting a new record for beef cattle outside of show stock. Five carloads sold the same day at \$10.35. Montana range steers sold at \$9, a record price for range cattle. Three carloads of Illinois cattle sold earlier in the month at \$10.10. These high prices are the natural result of the great shortage in beef cattle in this country. It may be many years before prices are lowered to any considerable extent. The day of cheap beef from our farms and ranges is a thing of the past. There is a growing scarcity, too, of hogs and sheep, according to all reports.

FENCING

One-Piece Stay Wire Poultry, Hog and Heavy Field Fencing.

Diamond and square mesh galvanized wire fence at wholesale prices. We have no dealers. We sell direct to the farmer giving the dealers' profits to him. Our free catalogue shows Implements, Paint, Furniture, Bicycles, Roofing, Carpet, Engines, Pumps, Etc., all at wholesale prices. Send for it.

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BIG MONEY in the OFF SEASON

One Man can run it.

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Bores a well 100 ft. deep in 10 hours. One man can run it; it operates it and easily moves it over any road. Bore everything except hard rock, and it drills that No tower or staking, rotates its own drill. Easy terms; write for catalogue.

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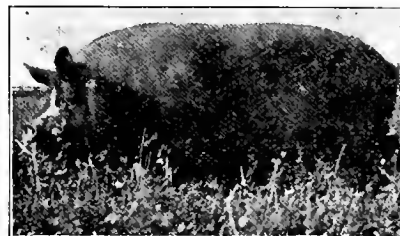
CALIFORNIA

Howard Cattle Company

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PEDIGREED LIVE STOCK

The Berkshire Sow pictured is one of a number out of which we have some first class Berkshire Pigs.



GLENVIEW YOUNG STOCK FOR SALE

One Good Yearling Boar, Prices Right
Chas. R. Hanna, R 3, Riverside, Cal

J. FRANK SMITH & SONS

Breeders of REGISTERED DUROC-JERSEY SWINE.

Young stock for sale, out of dams of choice breeding and sired by two great boars Billie Rosebud, Jr., No. 89729, and Nebraska Sensation, No. 108661. These boars carry the blood of great winners and producing hogs.

We also offer a number of Bred Gilts, sired by Nebraska Sensation and bred to Col. Chief. All stock guaranteed to be as represented. Address:

Route No. 1, Box 42.

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Hanford, Cal

HAMPSHIRE SWINE

My Hampshire Hogs have been selected with great care, and my herd is one of the oldest in America. Herd headed by El Salvador, winner of two silver cups in the strongest competition of the Middle West. Fifty young sows and boars for sale. This breed has won over all others in the dressed carcass contest for several years at the International Fat Stock Show.

Frank Reed Sanders,
SALT RIVER VALLEY, MESA, ARIZONA.



SHEEP



National Wool Growers' Committee Makes Report

F. A. Ellenwood of Red Bluff, Cal., Secretary of the California Wool Growers' Association, who was one of a committee appointed at the annual meeting of the National Wool Growers' Association at Omaha last December to represent the association at the National Capital in an effort to secure a satisfactory adjustment of the wool tariff, has issued a report of the work done.

The National Wool Growers' Association had agreed that the only proper method of collecting wool duties was upon the scoured content and not upon the grease pound. The committee decided to await the report of the tariff board, composed of two Republicans, two Democrats and one Independent, and "not only abide by its findings, but strive to have Congress frame a law in accordance with that report no matter what reduction it might show in the duties on wool or manufactures thereof." It was believed that such a law would undoubtedly represent the minimum of protection, but would be free from any just criticism and perhaps remain unmolested for some time to come, thus allaying the tariff agitation that now costs the wool grower so much.

While the committee was awaiting the report of the tariff board it secured a room in the Senate office building and arranged a complete display of wool of all grades, showing values and shrinkage, wastes accruing in manufacture, and other important points. Every effort was made to interest Senators and Congressmen, and place the issue squarely before them. But after the report of the tariff board was received the committee found that the Democratic leaders would not consent to a law based upon the report. To use the words of Mr. Ellenwood, they preferred "to have the present law remain as it is for a campaign target at the coming election for the success of the party rather than support such a bill."

While the committee was unsuccessful in securing the passage of a bill assessing the duties on wool upon the scoured wool content, it deems that it did accomplish much for the future benefit of the industry, summed up as follows:

"First—We convinced all fair minded men who are willing to recognize the principle of protection that the 'scoured pound' system is the only fair and equitable method of assessing wool duties.

"Second—We succeeded in having the duty arranged at 18 cents instead of 15 cents per pound on scoured content, and whenever a protective measure is framed in the future it will be much easier to secure 18 cents than if this law had been framed at 15 cents at this time.

"Third—We convinced the manufacturers and wool commission men that the sheep men of the West are not so ignorant after all as they have had good reasons to believe, owing to the fact that any legislation they might dictate the wool growers have always been ready to support without serious thought, and much to our sorrow we

see where we have been terribly misled. They realize now that we are giving the subject some serious study at least, and any legislation to which we lend our support in the future will give both producer and consumer a square deal as well as importer and manufacturer.

"Fourth—Many Congressmen now realize the fact as never before that the present price of clothing is not due so much to the tariff as to the fact that it changes hands so many times at a large per cent advance each time before it reaches the consumer. For example, even under the present high tariff \$1.75 will buy all the wool needed for an all-wool suit retailing from \$30 to \$40. After the wool is manufactured into cloth \$5.25 will buy the necessary amount of cloth for this suit at the mill. After the jobber adds 50 per cent or more, and oftentimes it is handled by two jobbers, but if handled by only one it would cost the tailor \$7.87 or \$8 perhaps—50 per cent to the tailor makes the cloth for the suit cost the consumer \$12 or more. It requires about \$4.50 to pay for lining, buttons, padding, etc., making a total of \$16.50. Next comes the labor cost for making the suit which ranges from \$15 to \$30, say \$20, and the total cost of the suit is \$36.50, of which amount \$1.75 went to the wool grower. The wool grower is not objecting to anybody's profit, but he does object seriously to statements that the cost of the wool or the cloth at the mill, owing to the present oppressive tariff system, comprises the bulk of the cost in a suit of clothes, and that a reduction in the duty on wool would materially reduce the cost of clothing when the facts in the case will not warrant any such statements.

"I have tried to state conditions just as they actually exist without prejudice or favor," continues the report, "and while we have good reasons for criticising the manufacturers, the importers, the wool commission men and even the acts of Congress, or at least the acts of some Congressmen, I feel that I would not be telling the whole truth if I refrained from pointing out

some of the faults of the wool growers, and, therefore, I submit the remainder of this report for the special consideration of the wool growers in the hope that the ultimate result may be the betterment of conditions which no one but ourselves can improve.

"In order to better understand the tariff question, that I might see it from all view points and to learn as much as possible about wool, both foreign and domestic, and all manufactured products thereof while in the East, I visited the wool warehouses, the worsted and woolen mills, the carpet mills and the shoddy mills, receiving most cordial treatment from all men interested in the manufacture of wool. I do not wish to go into details concerning the knowledge I gained by study of conditions in the mills, only to explain why the growers in the United States are losing about 1 cent per pound on their wool due mostly to improper methods of preparing the wool for market. When one sees how foreign wool is prepared for market piled up in mills beside our own, he immediately feels ashamed, to say the least.

Paint Brands.

"The first evil comes from branding with paint or tar that cannot be removed in the process of scouring. These brands have to be clipped off at the mill, which means additional labor cost, besides the loss in weight to the manufacturer. It is seldom we see any paint brands on foreign wool, and it is not necessary here. In a small outfit no branding is necessary, but in large outfits or where men are buying and selling it may be necessary. If tar or paint must be used let the brand be as small as possible, being careful not to have any spilled on the sheep at the time of branding, then at shearing time have these paint brands removed by clipping them off out in the corral, before the sheep are penned for shearing. It can be removed here much cheaper than after it reaches the mill.

"The next thing of importance is the twine used for tying wool. Use as little twine as possible—just enough to go twice around the fleece tied so it will hold until it reaches the factory, and be sure it is the proper kind of twine. Do not use Sisal or binder twine, as the fibers from these get into the wool and remain there until it is made into cloth, where they show

up owing to the fact that they will not take the dye, and often spoil a fine piece of cloth. At present there are only two kinds of twine to my knowledge fit to be used. One is the glazed twine. The other is a paper twine. Either of these strings should be used instead of those used at the present for tying fleeces. Let it be noted that there exists a similar damaging fiber on the inside of wool sacks. This can be overcome somewhat by turning the wool sacks inside out and shaking off all the loose fibers and clipping off the others easily seen hanging, before putting any wool in the sack; or, better still, a paper lining could be used in the sack the same as is now used when scoured wool is baled for shipment.

"Some Australian growers turn the sack inside out, stretch it over a frame and singe all the loose fibers off with a small lamp.

Sorting.

"The next important thing is sorting as much as possible at the shearing pens. If nothing more, at least sack ewe fleeces, wethers, hucks and lambs' wool each by itself, with a distinguishing mark on the same. Keep all the black, gray and pinto fleeces by themselves, and sack separately, not that it is worth any more, but less when mixed with other wool, as all these black, gray or brown fleeces, or parts thereof, and even stained fibers of wool, have to be separated from the white before it goes into cloth. Men are employed at the mill to pick out all these after they have been mixed with white wool, when they could easily have been kept out in the beginning by the grower.

Tags.

"When tying the fleece keep all the tags out and sack by themselves, and don't sack anything that is not wool. I would be ashamed to put in print all the things I saw and heard of at the mills that come there tied up inside of a fleece of wool. That more care might be taken in tying the fleece to sort out tags, tie a better knot, etc., I think this should never be left to the shearer, who naturally has no interest in that regard, but it should be done by some one interested and responsible, who makes this his special business at shearing time. And right here I must say just a word to the shearer. While I would relieve him of the duties of tying the



First Prize Shropshire Flock at California State Fair. Owned by Bishop Brothers, San Ramon, Cal.

fleece where hand shears are used, I would insist on his being more careful about making 'second cuts,' or 'summer-fallowing,' as they call it. This shortens the staple of the main fleece, which is important, and lessens the value thereof, while the short fibers cut off by the 'second cut' become an oil waste in the process of combing at the factory, and are worth only 60 per cent of their original value.

"Much more could and should be said about the improper methods employed in the preparation of wool for the market, but I think I have written enough to show conditions could be improved. By improper packing of wool we cannot fool a wool buyer or the manufacturer who ultimately buys it. We can only fool ourselves. The buyer knows all about your wool, so far as the packing is concerned, before he ever sees it, as he has a report on it from last year and several years previous, perhaps, and your neighbor's also, and when he makes an offer on the wool these things are all taken into consideration, and deductions made accordingly. One cent per pound loss by improper packing of wool amounts to more than \$3,000,000 annually to the growers on our entire American clip."

In concluding his report Mr. Ellenwood makes a plea to all wool growers to support the national organization, which is doing much for the good of the industry. He says that complete organization means full realization of all honest efforts for the betterment of conditions.

NEVADA AGRICULTURAL COLLEGE AT THE CALIFORNIA STATE FAIR.

The University of Nevada Sagebrush, in a summary of the winnings made by the live stock entries from that institution at the recent California State Fair, brings out some facts of interest that were overlooked in the rush of a busy week at the Fair. The Sagebrush says:

"The classes shown were Holstein-Friesian and Jersey in the dairy breeds; Aberdeen Angus and Herefords in the beef breeds; Cheviots, Southdowns, Shropshires, Hampshires, Dorset, Horned and Rambouillet sheep; Berkshire and Poland China swine; Shorthorn, cross-bred and pure-bred Hereford fat steers.

"The Holstein cow, Stafford Mercedes Aggie Tuebie, was perhaps the most popular animal on the grounds. Crowds of admiring people were around her stall all the time, commenting upon her ability to produce 80 pounds, or ten gallons, of milk per day. The day before the Fair she gave birth to a bull calf, which shared considerable of the attention given his mother. A. Hollander, who manages a large dairy in the San Joaquin, offered Prof. True \$300 for the calf, but it was not accepted.

"The University of Nevada opened the show Monday morning by winning a blue ribbon on the Holstein bull, Tuebie Pietertje Colantha Lad. The good work was kept up throughout the show, and the University's 21-months-old Holstein heifer, Tuebie Pietertje Carren Fidessa closed the show by winning the butter-fat contest for cows under 3 years old, beating her nearest rival, another Holstein, .588 of a pound of fat, and the next rival, a Jersey, by .569 of a pound. This last winning netted the University \$50 and a silver cup, offered by the Holstein Association of America.

"The Aberdeen Angus cattle had many friends and admirers among the breeders and visitors. The yearling bull, Glenmere Prince, weighing 1550 pounds, caused many to stop and take another look and ask questions. Glenmere was junior champion of the show. In the Herefords, the cow Pearl, presented to the University two years ago

by Mr. J. H. Cazier of Wells, Nev., was found the blue ribbon senior champion cow under 3 years. In the fat steers the Shorthorn, Whitlaw 1, was second in the purebred classes and second in the free for all purebred steers.

"The spell of hot weather experienced during the Fair week took its toll in the swine sections. The University of Nevada's 600-pound 2-year-old Berkshire boar, Grand Master Lee's Son died a day before the class was judged and made a hole in the Nevada exhibit of Berks. Grand Master Lee, 875 pounds, twice grand champion of the breed, met his defeat and was second in the aged class.

"All the animals were returned last Tuesday and are at their quarters at the fair grounds, three blocks east of the University. Many people who did not know of their being have wended their way to the farm and visited them.

"The sophomores of the College of Agriculture taken to Sacramento to assist in the preparing and showing of the animals in the ring were: Dewar, Hylton, Evans, Menardi, Duddleson, Sinai and Cazier. All report having learned considerable, and that the trip was immensely profitable to them."

QUARANTINE EXTENDED.

Upon the advice of State Horticultural Commissioner Cook an alfalfa weevil quarantine has been established against the states of Utah, Idaho and Wyoming. For some time there had been a quarantine against certain portions of these states.

The quarantine prohibits the shipment of hay of any kind from Utah, Idaho or Wyoming into California. It prohibits the shipment of beehives from any one of the three states into California, and it prohibits the shipment of feed hay in cattle cars from these states into California.

It extends also to alfalfa seed, but this quarantine is not so strict as that against hay and beehives.

RED POLLED CATTLE AT STATE FAIR.

Through an oversight the Red Polled awards at the California State Fair were omitted in the Journal last month. The complete awards follow: Exhibitors—R. R. Cartwright, Angels Camp, Cal.; G. L. Cartwright, Angels Camp, Cal.

Bulls 3 years and over—First, Tom Roy, R. R. Cartwright; second, Wendel Heil, G. L. Cartwright.

Bulls 2 years and under 3—First, Billy Roy, R. R. Cartwright.

Yearling bulls—First, Sam Roy, R. R. Cartwright; second, Reuben Heil, G. L. Cartwright.

Bull calves—First, Duke, G. L. Cartwright; second, Red Cloud, R. R. Cartwright.

Senior champion—Tom Roy, R. R. Cartwright.

Junior champion—Sam Roy, R. R. Cartwright.

Grand champion—Tom Roy, R. R. Cartwright.

Cows 3 years old and over—First, Lettie, R. R. Cartwright; second, Hattie, R. R. Cartwright; third, Rena, G. L. Cartwright.

Cows 2 years and under 3—First, Mary Davyson, R. R. Cartwright; second, Lucile, G. L. Cartwright.

Yearling heifers—First, Nora Davyson, G. L. Cartwright; second, Rosv Dean, R. R. Cartwright; third, Louise, R. R. Cartwright.

Heifer calves—First, Daisy Laura, R. R. Cartwright; second, Baby Reene, G. L. Cartwright.

Aged herd—First, R. R. Cartwright; second, G. L. Cartwright.

Breeder's young herd—First, G. L. Cartwright.

Get of sire—First, R. R. Cartwright. Produce of dam—First, R. R. Cartwright; second, G. L. Cartwright.

CONDITION OF BREEDING EWE

Ensilage is not considered good for sheep, and if it is fed at all it should be fed very sparingly and at intervals of two or three days.

HILLCREST STOCK FARM

DAVIS, CALIFORNIA

T. S. GLIDE, Prop.

Breeder of

SHORTHORN CATTLE

SHROPSHIRE and MERINO SHEEP



HILLCREST LAD
First Prize Ram at State Fair, 1911

OFFERS FOR SEASON OF 1912
AN EXCEPTIONALLY FINE LOT OF
PURE-BRED AND REGISTERED
RAMS, YEARLINGS AND TWO-
YEAR-OLDS.

Wool, Hides, Grain, Dried Fruit, Dressed and Live Poultry Wanted

For the best results and to get the most money out of your different kinds of Produce, ship the same to us. Highest market prices and immediate cash returns guaranteed. Send us samples before selling elsewhere. Liberal advances made. Mark and consign your shipments direct to

W. C. PRICE & CO.
Paid Up Capital, \$50,000.
Established 1876.

213, 215, 217 CLAY STREET

SAN FRANCISCO

RAMBOUILLETS

I OFFER FOR SALE

1400 Yearling Rams

1000 Ewes

Prompt Delivery

Correspondence Invited

CHAS. A. KIMBLE

Hanford, California



SHROPSHIRE RAMS

140 Head of Yearling Shropshire Rams.

150 head of Ram Lambs.

These are all of my own breeding, and the choicest lot I have ever had.

Also Duroc Jersey Hogs.

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H. P. EAKLE, JR., Prop. (Phone, Res. 1801.) WOODLAND, CAL.

University of Nevada

RENO, NEVADA.

Breeders of

Percheron Horses.

Holstein-Friesian, Jersey, Aberdeen Angus and Hereford Cattle.

Shropshire, Hampshire, Southdown, Dorset-Horned, Rambouillet and Cheviot Sheep.

Berkshire and Poland China Hogs.

Correspondence Solicited.

TANKS TANKS

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Geo. Windeler, Prop.

Water Tanks, Wine Tanks made from carefully selected stock by careful and experienced workmen. "Tanks that are well made last a long time." It will pay you to get my prices before buying.

GEO. WINDELER,

144-154 Berry Street, San Francisco, Cal.



Wine Tank



Water Tank



Rambouillets on Ranch of Charles A. Kimble, Hanford, California. Breeding Stock From This Flock Is Scattered Over the Entire Pacific Coast.

FRESNO COUNTY FAIR.

In 1912 Fresno County Fair was handicapped by two unusually windy days, something very unusual for the time of year. With the exception of these two days the fair weather brought out good crowds, who saw an attractive exhibition and good racing.

The Fair management went to a great deal of expense this year to build new buildings and have an equipment second to none in the State for handling the exhibits.

The live stock show this year was not quite up to last year owing to the absence of a number of good herds of swine, dairy cattle and the pens of sheep which showed last year.

The draft horse classes were fairly well filled and a number of good individuals were shown. In the Percheron stallion classes the grand champion stallion Medallion, a magnificent dappled gray, shown by Elkhorn Percheron Stock Co., was the best of the lot.

George A. Smith of Corcoran had a fine string of imported Shire mares in the ring and swept the boards with them.

Ruby & Bowers had a string of Percherons, Clydesdales, Belgians and one Shire stallion. A part of this stock was the same as was on the State Fair grounds, and showed somewhat better form than at the State Fair.

The crack saddle horses were there and submitted to a somewhat erratic series of judgments, but put up a first-class showing even at that.

The beef classes were filled by the Shorthorns from the Glide and Howard herds, and the Newman Herefords. The boys had the heavy-weights in the pink of condition, and their exhibits were a big drawing card at the Fair.

In the dairy cattle classes the Jerseys were represented by entries from three herds, Locke getting away with most of the ribbons.

Only one herd of Holsteins was entered, that of Minor & Thornton, Kearney Park. This is the first time we have had an opportunity to see this herd, and found that it contains some good individuals. Their grand champion bull, Minnie Wayne De Kol's Son (89203), has stamped his excellent individuality upon his young sons and daughters, and they are a likely looking lot of youngsters. Minnie Wayne De Kol's Son is a bull of great size, good heart girth, straight back, fine escutcheon and well-placed rudimentaries. He is also a remarkably good handler, having a soft, mellow skin. On his dam's side he is rich in the blood of the De Kol, Hengerveld, Wayne and Creamelle families, and on the side of his sire he carries the blood of the De Kol, Pauline, Paul Hartog and Concordia families.

The first prize aged cow, Sara Jewel Hartog (170237) is a 4-year-old of good dairy type, showing evidence also of good constitutional vigor. She is a grand-daughter of De Kol's 2d Butter Boy 3d, and a grand-daughter of Sadie Vale Concordia's Paul De Kol.

Among the younger stock in the Minor & Thornton herd were noted many good individuals, particularly in the yearling and bull calf classes. There was also an extra good 2-year-old heifer and a splendid heifer calf.

The Dutch-Belted were represented by one herd, that of Mrs. Jennie Strader of Ceres, Cal. Mr. Strader's herd was not entered owing to the fact that he took a portion of the herd to Chicago to compete at the National Dairy Show.

The swine classes were very light, only two herds being entered, one a herd of Hampshires by Mrs. Jennie Strader and the other a herd of Tamworths by Frank Stark.

The awards follow:

SHORTHORNS.

Exhibitors—Howard Cattle Co., San Francisco; T. S. Glide, Davis, Cal.

Bulls 3 years old and over—First, King Lancaster 2d, Glide; second, Straight Archer 11th, Howard.

Bulls 2 years old—First, Greenwood Knight, Glide.

Senior yearling bulls—First, College Count 2d, Howard.

Junior yearling bulls—First, Clara's Knight, Glide; second, College Count 5th, Howard.

Senior bull calves—First, Hillcrest King, Glide; second, College Count 11th, Howard; third, Archer's Junior, Howard.

Junior bull calves—First, Greenwood King, Glide.

Senior and grand champion—King Lancaster 2d, Glide.

Junior champion—Clara's Knight, Glide. Cows 3 years and over—First, Mysie's Sequel, Glide.

Cows 2 years and under 3—First, Greenwood Queen, Glide; second, Greenwood Bride, Glide; third, Luella of Valley View, Glide.

Senior yearling heifers—First, Bapton Queen, Howard; second, College Lady, Howard.

Junior yearling heifers—First, Luella Lancaster, Glide; second, Hillcrest Lady, Glide; third, Archeress 21th, Howard.

Senior heifer calves—First, Countess Churchill, Howard; second, Winsome Countess, Howard; third, Hopeful Countess, Howard.

Junior heifer calves—First, Lady Perfection, Glide; second, Lustrous, Howard; third, Produce of Luella of Valley View. Senior and grand champion cow—Greenwood Queen, Glide.

Junior champion cow—Bapton Queen, Howard.

Get of sire—First, get of King Edward, Glide; second, get of Straight Archer 11th, Howard; third, get of Knight's Perfection, Glide.

Produce of dam—First, Produce of Lancaster Bride, Glide; second, Howard; third, Produce of Luella of Valley View, Glide.

Aged herd—First, Glide. Breeder's young herd—First, Howard. Calf herd—First, Howard.

HEREFORDS.

Bulls 3 years old and over—First, Young Donald.

Yearling bulls—First, Finished Goods; second, Early Goods.

Cows 3 and over—First, Pride of Humboldt 18th.

Cows 2 and under 3—First, Lenora E.; second, Sweet Lass.

Yearling heifers—First, Sugar Plum; second, Newman Special.

Heifer calves—First, Ringmistress; second, May Queen.

Champion bull—Young Donald. Grand champion cow—Sugar Plum.

JERSEYS.

Exhibitors—N. H. Locke Co., Lockeford, Cal.; D. S. Lee, Fresno, Cal.; Geo. A. Smith, Corcoran, Cal.

Bulls 3 years and over—First, King's Valet, Locke.

Bulls 2 and under 3—First, Marigold Fox of Lockeford, Lee; second, Grace's Fox of Venaderra, Locke.

Yearling bulls—First, Valet's King of Lockeford, Locke; second, Foxy King of Lockeford, Locke.

Bull calves—First, Leda's Golden Ladie of Lockeford, Locke; second, Valet's Journalist of Lockeford.

Grand champion bull—King's Valet, Locke.

Cows 3 years and over—First, Lemolla's Belle, Locke.

Cows 2 years and under 3—First, Valet's Golden Biddy of Lockeford, Locke.

Yearling heifers—First, Financial Prospect of Lockeford, Locke; second, Golden Rosebud of Lockeford, Locke.

Heifer calves—First, Valet's Handsome Lemolla of Lockeford, Locke; second, Valet's Bright Eyes of Lockeford, Locke.

Grand champion cow—Valet's Golden Biddy of Lockeford, Locke.

Aged herd—First, Locke.

Breeder's young herd—First, Locke.

Get of sire—First, get of King's Valet, Locke. Produce of dam—Produce of Golden Biddy, Locke.

HOLSTEIN-FRIESIANS.

All awards to Minor & Thornton.

RED POLLED.

Exhibitors—R. R. Cartwright, Angels Camp, Cal.; G. L. Cartwright, Angels Camp, Cal.

Bulls 3 years and over—First, Tom Roy, R. R. Cartwright; second, Wendel Heil, G. L. Cartwright.

Bulls 2 years and under 3—First, Billy Roy, R. R. Cartwright.

Yearling bulls—First, Sam Roy, R. R. Cartwright; second, Reuben Heil, G. L. Cartwright.

Bull calves—First, Duke, G. L. Cartwright; second, Red Cloud, R. R. Cartwright.

Senior champion—Tom Roy, R. R. Cartwright.

Junior champion—Sam Roy, R. R. Cartwright.

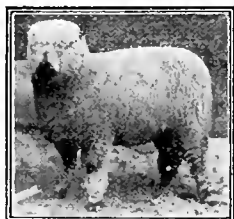
Grand champion—Tom Roy, R. R. Cartwright.

Cows 3 years old and over—First, Lettie, R. R. Cartwright; second, Hattie, R. R. Cartwright; third, Rena, G. L. Cartwright.

Cows 2 years and under 3—First, Mary Davyson, R. R. Cartwright; second, Lucile, G. L. Cartwright.

San Ramon Shropshire Flock

PUREBRED AND GRADE RAMS ALSO EWES, FOR SALE. INDIVIDUALS OR CARLOAD LOTS.



First Prize Ewe Lamb at Omaha

BISHOP BROS.

Mention the Live Stock and Dairy Journal When Writing to Advertisers.

We will sell 120 Grade Ewe Lambs originally selected for our own breeding flock. All by imported rams out of ewes from which we sell our grade rams. We consider them the best lot of grade ewes we ever had. They are fat and in fine condition. Owing to shortness of feed we will sell them at a very low figure.

Our grade flock at the State Fair, 1911, took every first and championship.

PRIZES WON BY FLOCK, 1911.

California State Fair—Thirteen out of fifteen first prizes and all of the four championships.

Omaha—First and second ram lambs; first and third ewe lambs.

Our grade rams are raised on the open range.



First Prize Ram Lamb at Omaha

San Ramon, California

Yearling heifers—First, Nora Davyson, G. L. Cartwright; second, Rosy Dearn, R. R. Cartwright; third, Louise, R. R. Cartwright.

Heifer calves—First, Daisy Laura, R. R. Cartwright; second, Baby Reene, G. L. Cartwright.

Aged herd—First, R. R. Cartwright; second, G. L. Cartwright.

Breeder's young herd—First, G. L. Cartwright.

Get of sire—First, R. R. Cartwright.

Produce of dam—First, R. R. Cartwright; second, G. L. Cartwright.

THE BEST LINIMENT

OR PAIN KILLER FOR THE HUMAN BODY

Gombault's

Caustic Balsam

IT HAS NO EQUAL

For the Human Body. It is penetrating, soothing and healing, and for all old sores, Bruises, Wounds, Felons, Exterior Cancers, Boils, Corns and Bunions. CAUSTIC BALSAM has no equal as a Liniment.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Persistent, thorough use will cure many old or chronic ailments and it can be used on any case that requires an outward application with perfect safety.

A Perfectly Safe and Reliable Remedy for Sore Throat, Chest Cold, Backache, Neuralgia, Sprains, Strains, Lumbago, Diphtheria, Sore Lungs, Rheumatism and all Stiff Joints.

REMOVES THE SORENESS—STRENGTHENS MUSCLES

Cornhill, Tex.—"One bottle Caustic Balsam did my rheumatism more good than \$120.00 paid in doctor's bills."

Price \$1.00 per bottle. Sold by druggists, or sent by express prepaid. Write for booklet, R. The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.

BEST MARKET PRICES PAID FOR PELTS, FURS AND MOHAIR

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Breeder and Importer of

Shropshire, Rambouillet

AND

American Merino Sheep

RED POLLED BULLS FOR SALE

Take electric car at Petaluma or Santa Rosa for Live Oak Station.

Address,

FRANK A. MECHAM,

Petaluma, Sonoma Co.,

Phone Rural 166

California

POULTRY DEPARTMENT

SHOW BIRDS

In a few weeks more the poultry show season will be in full swing, and it is up to the exhibitors to see that their fowls land in the show room in the best of condition. Each succeeding year should show a better quality, and should show advance in condition as well. A little time and patience devoted to your specimens will often bring surprising results. For instance, it is no trick at all to clean the shanks, beak, comb and wattles of any bird, yet how many splendid fowls are landed in the show room that are a disgrace to the exhibitor, and often they lose out, and so they should. While it is no fault of the bird it is a just rebuke to the exhibitor.

The general appearance of any bird is greatly improved by a good bath, properly applied, and the appearance of any of the colored or parti-colored varieties is greatly enhanced if they appear in the show room with neat combs and wattles and clean shanks and beaks.

All white fowls intended for exhibition should be washed, and well washed, and if the first attempt is not a success they should be washed again. In fact, some exhibitors recommend a second bath.

Having had some little experience of late years in preparing white birds for the shows, I will herewith give a brief outline of my method of preparation. I usually select my string for a show some ten days or a week in advance, and I place the birds in coops similar to those in a show room. These coops I have arranged in a convenient building. From the time I have my birds cooped they are really on exhibition. I handle them gently as often as I can find time, and try to keep them up to a good appetite so they will take food from my hands. Frequent handling and feeding small rations often are, to my way of thinking, two of the chief ends in training birds for exhibition. My coops are all filled with good, clean straw, and all the grain is thrown in this. As for the feed, I make little change from their daily rations, excepting the fresh meat of which I supply a small quantity daily. I do not feed quite so liberally, perhaps, as ordinarily, but try to see that they have enough of grain and green foods.

About three days before I ship them to the show I give each one a good bath, or washing, first in a tub of good ivory soap suds, thence into lukewarm rinsing water, and lastly into a tub of cold water in which a small quantity of bluing has been added. I take up all the surplus water from their feathers by using a carriage sponge and wrap them up in a bath towel and place them before the fire to dry, being careful not to let them dry too quickly. While their shanks are yet moist I take an ordinary toothpick and pass the point under the edge of each scale to remove the dirt, taking off any old scales at the same time. After they are thoroughly dried I place them back in training quarters on clean straw.

Just before cooping the birds for shipment I apply a small bit of camphorated oil to their combs, wattles and shanks and rub these off with a dry cloth. Solid plumage is best cleaned by using a cloth moistened with equal parts of alcohol and water. This should always have one's attention

before the judging begins.

Now, then, if exhibitors of the colored varieties will only take the trouble to clean the heads and shanks of their specimens, then take a cloth moistened with alcohol and water and spend a little time grooming their plumage, I dare say that they will feel doubly repaid if only from a point of their own satisfaction in the real quality they have brought out.

A. L. JENKINS.

POULTRY AT FRESNO

COUNTY FAIR

The new poultry building at Fresno Fair grounds housed the best poultry show ever given in the county when looked at from the quality standpoint. This improvement in quality is more desired than any great increase in numbers, for it shows that the local breeders are breeding a class of stock which will do credit to the county in outside shows. G. L. Hawley of Madera had an exceptionally good lot of Barred Rocks in the show, although for first pen he had to yield the place to H. A. Hechtman of Kerman.

The awards follow:

Barred Plymouth Rocks—First cock, first and second hen, first and second



New Standard Light Fawn and White Harshbarger Strain Indian Runner Ducks, 281-Egg Strain. Prize Winners at Ukiah Hop Festival and Poultry Exhibit, September, 1912. Owned by Frank Toles, Ukiah, Cal.

cockerel, first pullet, second and third pen, best display outside Fresno County (all breeds competing). G. L. Hawley, Madera; third cockerel, third pullet, H. H. Holland, Fresno; second pullet, first pen, grand champion pen, H. A. Hechtman, Kerman.

White Plymouth Rocks—First cock, third hen, third cockerel, first pullet, J. P. Sharp, Fresno; first and second hen, Russell Uhler, Fresno; first cockerel, George Hensley, Clovis; second cockerel, R. A. Botts, Hanford.

White Wyandottes—First hen, first cockerel, first pullet; first pen, F. H. Booth, Kerman; second and third pullet, W. R. Hart, Fresno; second and third cockerel, Lawrence Hall, Fresno.

Single-Comb Rhode Island Reds—First hen, second cockerel, R. A. Botts, Hanford; second hen, first and third cockerel, first, second and third pullet, first pen, J. A. Hacock, Fresno.

Black Langshans—First and second hen, E. J. Giebe, Fresno.

White Leghorns—First, second and third cock, first, second and third hen, second and third cockerel, first and third pullet, second pen, best display from Fresno County, J. F. Forney, Kingsburg, Cal.; first cockerel, first pen, Lawrence Hall, Fresno; second pullet, H. A. Hechtman, Kerman.

Rose-Comb Black Minorcas—First pen, first pullet, Otto Inglett, Fresno. Single-Comb Buff Orpingtons—First

cock, first, second and third pullet, Early Hughes, Fresno; first pen, Mrs. G. W. Hensley, Fresno.

Single-Comb Black Orpingtons—First cockerel, first pullet, Lawrence Hall, Fresno; first pen, Mrs. G. W. Hensley, Fresno.

Single-Comb White Orpingtons—First and second hen, second cockerel, second pullet, second pen, R. B. Covington, Fresno; first cockerel, first pullet, first pen, Mrs. Albert Marshall; third cockerel, third pullet, Raisin Poultry Yards.

White Crested Black Polish—First cockerel, first and second pullet, Russell Uhler, Fresno.

Bearded White Polish Bantams—First cock, first hen, E. J. Giebe, Fresno.

Frizzles—First cockerel, first, second and third pullet, first pen (white), G. Orphan; first hen (black), G. Orphan; first hen, first pullet (barred), G. Orphan.

Bronze Turkey—First gobbler, H. H. Holland, Fresno.

SUCCESS WITH INDIAN RUNNER DUCKS.

In the August issue of The Live Stock and Dairy Journal, in my article on the Indian Runner duck, I promised to give the number of eggs laid by my flock for the year. About two years ago I became interested in poultry, and having only a city lot and regular employment nearby, after considerable study I concluded that Indian Runner ducks would be the most practical line of poultry for me to invest in, as they promised better results for less work and time spent on them than any of the other lines. I soon found that if I would have any success with ducks on this coast care must be taken to procure a strain that would lay pure white eggs. In April of 1911 I received from Mrs. Wm. Harshbarger of Indiana three settings of fawn-and-white Indian Runner duck eggs. In May, from thirty-nine eggs, thirty-one ducklings were hatched, and carefully following directions, twenty-seven ducks were raised, fourteen of which, being drakes, I was able to dispose of at a good price for breeders.

The thirteen ducks I had began laying in September at the age of 4 months and 14 days. In September, 1911, 124 eggs were laid; in October, 238; November, 325; December, 341; January, 326; February, 301; March, 365; April, 337; May, 351; June, 325; July, 341; August, 285; September, up to date on which they began laying in 1911, 102, a total of 3655 eggs from the thirteen ducks, or an average of 281 eggs per duck for one year.

These, if sold at average market price would bring \$7 per duck. The cost of feed in this locality, this year being high, the net profit per duck would be \$4 as utility stock.

In January, 1912, I purchased a flock of White Indian Runners, twelve of which I kept for breeding purposes, making me twenty-five females including the thirteen Fawns, from which I have sold \$400 worth of stock and eggs, and have had to turn down several large orders of stock and eggs. This leaves me a good sized flock of both the Light Fawn and White and the pure White Runners which are not for sale at any price.

The equal of the Indian Runner as an egg producer has never yet been found, and undoubtedly some of my ducks have laid over 300 eggs each.

I know of no other business that requires so little capital, which will give such quick and great returns for the money invested if handled rightly, or no other business which affords such opportunities for a hustling man or woman to gain prominence more quickly. The demand for high grade show birds is increasing every year, and more utility stock is needed to furnish food. FRANK TOLES, Mendocino County, Cal.

Roofing

Same kind you pay double price for at home. We save you half on Mica and Sanded Ready Roofing, complete with nails and cement. Our free catalogue shows paint, fencing, furniture, engines, etc., at wholesale prices. Send for it.

OLD HICKORY SUPPLY CO.,

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1661 MISSION ST., SAN FRANCISCO.

BRED FOR EGGS AND MEAT

Bellevue strain of White and Columbian Wyandottes, S. C. White Leghorns and Light Brahmas. Stock for sale. Over thirty years in business.

MICHAEL K. BOYER,

Box L,

Hammonton, Atlantic County, N. J.

Come to Stockton Poultry Show, November 13 to 17

STOCKTON---LODI SACRAMENTO

8 Trains Daily Each Way
BAGGAGE CARRIED ON ALL TRAINS.

Central California Traction Co.



SOUTHBOUND.

No.	Leave Sacram'to	Arrive Lodi	Arrive Stock'n
7	7:10a	8:42a	9:00a
13	9:10a	10:45a	11:05a
17	10:15a	11:45a	12:05p
23	12:15p	1:45p	2:03p
29	2:15p	3:45p	4:00p
35	4:15p	5:45p	6:05p
41	6:00p	7:42p	7:52p
47	10:10p	11:40p	12:01a

NORTHBOUND.

No.	Leave Stockton	Leave Lodi	Arrive Sac'to
6	6:45a	7:00a	8:30a
10	7:45a	8:00a	9:35a
16	10:00a	10:10a	11:45a
22	12:05p	12:15p	1:50p
28	1:45p	2:00p	3:35p
32	4:00p	4:10p	5:45p
40	5:45p	6:00p	7:35p
46	8:00p	8:15p	9:42p

STOCKTON-LODI SERVICE.

Leave Stockton.

A. M.—6:15, 6:00, 7:00, 8:00, 9:00, 10:05, 11:00.

P. M.—12:15, 1:05, 2:00, 3:00, 4:05, 5:00, 6:00, 7:00, 9:10, 11:05.

*Daily except Sunday.

Trains Leave Lodi.

A. M.—6:05, 7:00, 8:00, 9:00, 10:10, 11:00.

P. M.—12:15, 1:00, 2:00, 3:00, 4:10, 5:00, 6:00, 7:00, 8:15, 10:00, 11:55.

*Daily except Sunday.

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At Stockton with Santa Fe for San Joaquin Valley points.

L. H. RODEBAUGH,

Traffic Manager, Stockton.

Questions and Answers

BY THE POULTRY SPECIALIST.

A valuable and instructive feature of our Poultry Department is "Questions and Answers." Any of our subscribers desiring advice or information upon any matter pertaining to poultry raising will please address Poultry Editor, The Live Stock and Dairy Journal, Sacramento, Cal., and answers will be printed in this department.

Poultry Editor The Live Stock and Dairy Journal—Will you tell me in your next issue when to pick Indian Runner ducks, or is it advisable at all?—M. H., Mountain View, New Mexico.

It is not advisable nor profitable to pick feathers off ducks of any breed. If they are picked they will stop laying for some time, probably as long as a second molt. Then eggs are what Indian Runners are desired for generally, while the price of duck feathers are quite low in comparison to those of geese, the latter bringing some 50 cents to \$1 a pound at wholesale. One other comparison. Geese lay only from thirty-five to sixty eggs during the season, according to breed and treatment, so the time for picking can easily be arranged without disturbing the laying abilities to any great extent, while ducks lay around two hundred if a good strain and well treated.

Poultry Editor The Live Stock and Dairy Journal—Will you tell me what to use for a good and cheap remedy against mites?—M. L., Long Beach, Cal.

Most of the liquid lice killers sold by the supply houses are good because they contain some tar product, for anything in the nature of tar or oil will destroy the pests. Black crude oil is a fine article for the purpose in addition to being cheap.

Poultry Editor The Live Stock and Dairy Journal—Can you tell me the cause of my ducks dying at intervals, and suggest a remedy. They get plenty of grain, a mash at times and some green stuff, with plenty of water. They seem to die quickly, and yet appear healthy. A reply in your Journal will oblige.—M. M., Los Angeles, Cal.

Your way of feeding is the cause of death, for ducks require mashes all the time or nearly so, and you must mix a little grit or coarse sand in the feed every time, or give them a pile where they may dig their bills in when required. Also give more green stuff.

Poultry Editor The Live Stock and Dairy Journal—I have some fine Toulouse geese, and I want to get them mated right for next season, but do not know how. Will you please help me in advance?—S. T., Willits, Cal.

If your geese are between 1 and 2 years old mate not more than two to one gander of between 2 and 3 years by keeping them together in a pen separate from the others through the winter, doing the same with two geese, then you will have best success in hatching eggs next season, for they must be mated or very poor results will follow in the hatchability.

Poultry Editor The Live Stock and Dairy Journal—I have noticed lately in the chicken yard where my hens are there are little bunches of worms at intervals, appearing like coarse thread of a yellowish white in color. As I believe some of my hens have dropped them, I would be pleased if you will kindly tell me what to do. Thanking you in advance.—N. B., Fresno, Cal.

There is no question that the hens have worms, and as they will pick them up when dropped by others, it means a continuation of the disease, so the advice is to clean up thoroughly of all refuse and litter, then spray with a strong disinfectant in every part. To medicate give each hen and rooster one dose daily for three days in succession of the following: One part spirits of turpentine and two parts olive oil mixed, a tablespoonful to each bird. If too many to treat individually, mix the same in the mash, counting half a tablespoonful to each bird in that case, and also mixing some finely chopped garlic or onions in the same. Clean up daily.

Poultry Editor The Live Stock and Dairy Journal—Some of my 6 months' pullets appear runty. They have been fed cracked corn, wheat and bran, though for green stuff I have been short, so they could not get as much as I would like to have supplied. Is the runty appearance the effect of lack of green stuff?—Mrs. M. W., Coquille, Ore.

Partly so, but you did not mention any beefscrap, fish meal or blood meal, or grit, for growing chicks must have animal food and grit so that your feeding is at fault. If you had fed them equal parts of wheat and Kaffir corn in plenty of scratching material, given them either dry or crumbly mashes of equal parts bran, feed meal and shorts, with 5 per cent of some animal food, and supplied grit and some green stuff, you would have fine, full grown chicks.

Poultry Editor The Live Stock and Dairy Journal—I have a pen of White Leghorns, and next to it a pen which some neighbors say are White Minorcas, and which are somewhat better layers. Will you please tell me the distinguishing marks of White Minorcas as compared to White Leghorns?—T. Y., Oakland, Cal.

The White Minorcas have white or pinkish white shanks, toes and beaks, while the White Leghorns have yellow legs, toes and beaks. The former should have six distinct points in the comb, the latter should have but five, and the Minorcas are a trifle larger bird at the same age as a rule. As to laying ability it will depend somewhat on the strain, though the writer has found some very fine egg producers among the White Minorcas as well as the Black of that breed.

Poultry Editor Live Stock and Dairy Journal—My young turkeys have got fine red wattles, and appear quite healthy, but they seem to be awful hungry all the time, and gobble the feed voraciously. Must I feed them as much as they will eat at each feeding time? Expecting to see a reply in your next issue, and thanking you, I am, Yours Truly.—N. H. T., Yuma, Ariz.

As they have got their red in wattles and are healthy, by all means give them what they will eat, especially if you want some of them for Thanksgiving table.

HATCHING IN NOVEMBER.

Eggs are high at this time, but chicks hatched in November or December are worth much more, and their value will be proportionately increased as they come to laying time, to which may be added another point in favor of hatching chicks instead of selling eggs in these months, which is, poultry of any kind do better in growth and vitality when hatched during the cooler months than those brought to life later. That is, if right attention is given them.

Of course, there is a great incentive to sell eggs when they get to 40 or 45 cents at wholesale, and they will go some higher before Christmas, the writer having foretold the present prices some months ago by knowing the conditions of the poultry business and keeping watch on the markets, but there are some other reasons for placing what eggs you can in the incubator or under old biddy. What roosters you get from the hatches of this month and next will be worth considerable as broilers and fryers if you

bring them along quickly, while the pullets are worth much more for early layers. If you wait till February, March and April every one will be hatching because eggs are plentiful, consequently the broilers, fryers and pullets from those months will be considerably lower in price.

Chickens hatched in November and December certainly require some better care from cold winds and rains than those hatched in warmer months, but if ordinarily good care is bestowed they will more than repay in growth, sturdiness and early laying.

As to what constitutes good care you must commence with the egg production to get good stock which will be worth while, and that means the laying hen. She must be quite healthy, of standard bred stock and selected for egg production, these points being applicable to every hen from which eggs are used for hatching, whether a dozen or a hundred.

Few men and women, comparatively, know whether a chicken is healthy or sick, and many are careless about

Poultry Show at Modesto, California

—of the—

Stanislaus Poultry and Pet Stock Association

DECEMBER 18, 19, 20, 21, 1912.

Liberal Premiums. Write for Premium List.

C. E. NICHOLS, Secretary.

MODESTO, CAL.

THE MANOR FARM C. S. WAKEFIELD, Prop

PETALUMA, CAL.

RHODE ISLAND REDS

Unexcelled in type and color. Egg producers. We started our showing season this year at Santa Cruz and took 21 prizes. Eight specials on color and type, male and female.

BARRED ROCKS.

S. C. BLACK MINORCAS.

S. C. WHITE LEGHORNS.

ORPINGTONS AND ANCONAS.

Eggs, Chicks, Stock. Pens and Trios a Specialty.

Now Ready—S. C. White Leghorn Pullets From Heavy Layers.

ASK YOUR DEALER FOR

EL DORADO COCOANUT OIL CAKE MEAL

—for—

CHICKENS, MILK COWS, HOGS AND YOUNG PIGS.

Cheapest Food in the Market Today. If Your Dealer Doesn't Carry It

Address:

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Young Stock and Eggs for Sale

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CASTRO HILL GAME FARM

WHITE AFRICAN GUINEAS.

PHEASANTS—Chinese Ring-Neck and Golden.

ORPINGTONS—Buff, White and Black.

COCHIN BANTAMS—White and Buff.

Visitors Welcome.

Phone: Farmers 240.

MELLETT & CO., R. 3, Box 33, Hayward, Cal.

ROUP

Contagious Catarrh, Swelled-Head, Chicken-Pox, Diphtheria and similar contagious diseases of chickens, including Black-Head of turkeys, can be easily cured by using **DR. WHEELER'S SPECIFIC No. 1** in the drinking water, and it is sold by

J. E. HOLT, Sunland, Cal.

for \$1, and 5 cents postage, with expert advice free. Scores of unsolicited testimonials.

Also best remedy, "RAISALL," for White Diarrhoea and Cholera of chicks at same price.

Poultry Breeders' Directory

Under this heading, for a nominal charge, payable in advance, we will insert names and addresses of breeders of various varieties of poultry. This is done for the convenience of owners of flocks who wish to keep their names before the public the year round. Display advertising is undoubtedly the big business getter of today, but no doubt there are many breeders who are not justified in carrying a display ad during the entire year. To such breeders the economy and convenience of this column is readily apparent.

S. C. WHITE LEGHORNS.

M. Duntbernd.....Petaluma, Cal.
C. B. Carrington.....Hayward, Cal.
J. H. Meyer.....R 3, Modesto, Cal.

RHODE ISLAND REDS.

Jack Lee.....R. 3, box 58, Petaluma, Cal.
Manor Farm.....Petaluma, Cal.

BARRED PLYMOUTH ROCKS.

F. W. Hardman.....Volta, Cal.
L. N. Cobbledick & Co.....Oakland, Cal.

BUFF ORPINGTONS.

C. E. Futrell.....Visalia, Cal.

WHITE ORPINGTONS.

Mrs. O. S. Moore, R. 1, Bx, 49, Modesto.

WHITE WYANDOTTES.

M. A. Pilgrim.....Chico, Cal.
A. L. Jenkins.....Sebastopol, Cal.

BUFF LEGHORNS.

P. Ellis.....R. 3, Modesto, Cal.
G. L. Meadows.....Hanford, Cal.

ANCONAS.

O. E. Palmer.....Dinuba, Cal.

BLACK MINORCAS.

J. P. McDonough.....Geyserville, Cal.

WHITE MINORCAS.

L. N. Cobbledick & Co.....Oakland, Cal.

BUFF MINORCAS.

Mrs. I. H. Tuttle.....Watsonville, Cal.

S. C. RHODE ISLAND REDS.

Mrs. M. A. Saylor.....Orland, Cal.
B. H. Brubaker.....Corning, Cal.
H. E. Hill.....R. 6, Box 90, Hanford, Cal.

SILVER-SPANGLED HAMBURGS

H. E. Hill.....R. 6, Box 90, Hanford, Cal.

PEKIN DUCKS.

W. F. Hensel.....Hanford, Cal.

S. C. White Leghorns

Our birds won every first, second and two third prizes and three specials at the Petaluma Poultry Show, 1911. Circular Free.

M. DUTTBERND,

R. 1, Box 92-3, Petaluma, Cal.

VILLA MARIA

DUX! DUX!

Standard-Bred.

Buff Orpington, White Indian Runner and Fawn and White Indian Runner Ducks.

CHARLES Y. PARKER,
P. O. Box 124, Hanford, Cal.

the outcome when sick hens are pointed out to them, just letting the sick ones run around in the old way among the healthy, not treating with medication, separation, cleanliness or care of any kind, yet placing in the incubator what eggs may be produced and expecting bright, healthy youngsters from them. Comments on such carelessness, haphazard ways are useless.

Again, eggs are collected from a flock of mixed breeds, many of which have no breed whatever and far less egg productiveness, except in the flush of the season when any old runt will show a few, and those eggs are placed under a hen or in an incubator with the full expectation of getting some fine chicks of a good breed, and yet many of these people would hardly expect a race horse from an old plug, but where is the difference?

When the baby chicks come out they require good care, especially with regard to right warmth for the first few weeks, for here is where many fail to see the primal cause of the heartaches through losing so many. If there is a mother hen there is less probability of losing any because she generally gives the baby chicks warmth when they get chilly, ever around or near them so they can run under the outstretched wings, so in a few minutes the chilliness is gone, but with many caretakers there is forgetfulness or carelessness in thinking the day is warm for humans, overlooking or ignoring the fact that little fluffies are frail, tender and poorly clad to stand the changes of temperature, so they are pushed out in the open too early in the morning, left in the evening chill, or allowed to get damp or chilly by some fog or cloudy atmosphere, the result being white diarrhoea, and the disease a contagious one, is communicated to the others. Some die quickly, while others linger along for some days, the owner wondering what causes them to languish and die.

If you will give them the right heat, about 95 degrees the first week and five degrees less each week down to 75 or so, pushing them in the brooder when any chilliness appears, feed regularly, supply clean water, grit and charcoal, and give green stuff every day, with strict cleanliness, they will come along fine.

The Coos and Curry County Fair held at Myrtle Point, Ore., closed a most successful exhibition September 28th. It is the first fair held in the county, and everybody was enthusiastic over it. The stock exhibits were good, and next year the association expects it to be far bigger and better. More pens and barns will be built to accommodate live stock, and new buildings will be erected for agricultural exhibits. The officers of the association are P. O. Dement, President; L. A. Roberts, Secretary; Dr. W. O. Sommers, Treasurer.

White Wyandottes

If you want the best in California in Stock and Eggs, ultimately you will have to come to me.

Cockerels\$5.00 to \$25.00
Hens3.50 to 5.00
Pullets3.00 to 10.00
Eggs.....\$4.50 and \$10.00 per 1

A. L. JENKINS,

Sebastopol, California

SEND FOR IT NOW "Chickens From Shell to Market" MAILED FREE

Tells how to place your houses, how to build them, how to feed the little chicks, how to prevent diseases among poultry, how to cure affected birds, how to conduct your poultry department so that it will yield you a good profit. You need this book.

Coulson Poultry and Stock Food Company
PETALUMA, CALIFORNIA.

E. B. NEILSON, Oroville, California

BREEDER OF

SILVER LACED WYANDOTTES

On Three Entries at California State Fair I Won Two Firsts and One Second.
Nothing to Sell Until After January 1st.

A SHOW YOU CAN'T AFFORD TO MISS

3rd Annual Poultry and Pigeon Show

—of the—

San Joaquin Poultry Association At Stockton, California, November 13 to 17

LIBERAL PRIZES.

LARGE ARRAY OF TROPHIES.

JUDGES.

N. W. Kauble, Will Purdy, R. V. Moore,
W. C. Baldwin, J. H. Crow.

Premium List Out Soon. Send in Your Name to Secretary for Copy.
Competent Attendants in All Departments.

WM. H. MacKAY, Secretary.

STOCKTON, CAL.

PACIFIC COAST LAYING CONTEST

To Be Conducted by Napa County Poultry Association, Napa, California
From January 8th to June 8th, 1913

SOMETHING FOR UTILITY POULTRY

Pens of Six Birds.

Rules, Regulations and Prize List Will be Ready November 10, 1912.

This contest will take the place of the contemplated Poultry Show on December 19-22, 1912. Extensive arrangements will be made for the proper housing and feeding of the birds and the yards will be cared for by men who have had many years of success in the business. We conducted a very successful show last year, and know we can conduct a successful laying contest.

Napa County Poultry Association

NAPA, CAL.

WALLACE RUTHERFORD, Secretary.

CLASSIFIED ADVERTISEMENTS

Rates—Two cents per word each issue. Minimum, 50 cents. Abbreviations and initials count as a word. Count every word in the advertisement

POULTRY.

EGGS, CHICKS, STOCK—Any quantity. Rhode Island Reds (both combs), Japanese Silkies, S. C. White Leghorns. More prizes won on Reds than any two competitors (Hirsh barred) on the coast in 18 months; 168 prizes, 12 silver cups. Week's feed given with every 100 chicks. Eggs from prize winning pens, \$7.50 and \$5 per setting. Utility, \$1.50 per setting. Chicks \$15.00 per hundred. Write for circular. Jack Lee, R. 3, Box 58, Petaluma, Cal.

FOR SALE—Choice Barred Plymouth Rock cockerels (Hawkins Royal Blue strain), now ready for mating. Also Barred Rock and White Leghorn chicks. Enoch Crewe, Santa Cruz, Cal.

BARRED PLYMOUTH ROCKS—New York, Topeka and Kansas City Winners. Eggs for hatching from twenty grand yards. Choice stock for sale. Sixteen years breeding Barred Rocks exclusively. Charles H. Voddem, Box 296, Los Gatos, Cal.

BLUE ANDALUSIANS of the strain of the VISALIA POULTRY CO. are winners of all the blue ribbons and cups wherever entered. Eggs only this season. First pen headed by the famous "Bamboo" Standard of Perfection. Visalia, Cal.

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TWELVE CHOICE ROSE-COMB WHITE LEGHORNS—A few chicks, a bargain. Eggs of above. Also Jubilee Orpingtons, prize birds. E. J. Hall, 507 Mission St., San Francisco.

PRIZE HOUDANS—Catalogue now ready. Mrs. Emma F. Reid, R. F. D. 4, Box 54, San Jose, Cal. Life member American Poultry Association.

BELL STRAIN WHITE ORPINGTONS—A few choice cockerels, 3 months old, for sale. Inquire Pagehurst Poultry and Stock Farm, Orland, Cal.

CHICKS! CHICKS! CHICKS! 10c UP—We ship everywhere. Send today for 66-page catalog, illustrated. PULLETS 2, 3, 4, 5 and 6 months of age. Fine White Leghorns 10 to 12 months of age, \$9 per dozen. Write us your wants today. The Pioneer Hatchery Co., 112 E. Eighth Street, Los Angeles, Cal.

LIVE STOCK.

O. I. C. PUREBRED REGISTERED HOGS—Young stock, both sexes. Write for prices. Pedigrees guaranteed. Best foundation stock in State. J. W. Benoit, R. 2, Modesto, Cal.

SWINE FOR SALE—I can provide you with Poland China, O. I. C. Hampshire and Berkshire young stock of both sexes. Purebreds. Prices right. Jas. Willison, R. 4, Modesto, Cal.

WHEN YOU DESIRE SWINE, remember that I am a breeder of purebred O. I. C., and can supply you with young sows and boars out of famous dams and by prize winning sires. Best Eastern and California blood. Write for prices and pedigrees. Can give immediate delivery. R. A. East, R. 2, Modesto, Cal.

I have a few purebred Holstein bull calves out of my best registered cows for sale. These young males are choice-ly bred. Have many registered cows coming in this fall. Write now and engage their offspring. For prices and pedigrees write B. F. Anderson, Modesto, Cal.

REGISTERED JERSEY BULL FOR SALE—Or will trade for heifer. He carries the blood of two world's champions. Dropped November 6, 1911. F. E. Thayer, Live Oak, Cal.

O. I. C. HOGS—I breed purebreds only. All registered, and papers go with all sales. Sire, Creamery Sport, whose sire is Martin Sport; dam, Pansy Blossom. Have six 1-year-old sows for sale. Also young stock coming along. Write me to reserve your orders for young stock of both sexes. M. A. McLean, Route 5, Modesto, Cal.

What Have You to Sell or Exchange?

No matter where you live in California, Arizona, New Mexico, Utah, Nevada, Idaho or Oregon, the Classified Advertisements in the JOURNAL are read by your neighbors. Perhaps some one within ten miles of your home wants to buy just what you want to sell, and would buy from you if he knew what you have. Tell him what you have through this classified page.

NEVADA BRED BERKSHIRES—Bred to breed and to win. Masterpiece and Master Lee, sires. Rugged, pasture-fed pigs. Come and see them, or write. L. B. Patrick, Box 287, Reno, Nev.

PUREBRED DUROC-JERSEY BOAR for sale—Fifteen months old. Bargain. Inquire Pagehurst Stock Farm, Orland, Cal.

FOR SALE—Registered service Jersey bulls and bull calves from prize winners and big producers. Unregistered Jersey bull calves at \$25 each from registered sires and choice Jersey cows. Dairyman's opportunity.

Seventy acres choicest Mokelumne River Bottom Land; will produce five crops alfalfa without irrigation; improvements, two large stock barns, skimming station, house, sheds, Bartlett pear orchard.

Gaited saddle, driving and business horses. A licensed imported German coach stallion, N. H. Locke Co., Lockeford, Cal.

FOUR PUREBRED HOLSTEIN BULLS FOR SALE—All registered and papers go with sale. These fine individuals were raised by the well known breeder, C. T. Brown of Porterville. Pedigrees and ages follow: Captain Zampa Ormsby (92136), 16 months, sire Silenshade Cantate (5777), dam Lady May Ormsby (14118). I have also a 2-year-old, Hart Ormsby, sire Sir Skylark Ormsby Hengerveld (39133), dam Leda Hartog De Kol (135401), and two 16-months-old fine young sires by Silenshade Cantate. For quick sale, \$100 to \$150, according to age and pedigree. Write or call on J. A. Pollard, Modesto, Cal. Ranch one mile from town.

JERSEY BULL CALVES FOR SALE—By such sires as Mona's Topper and Oxford Victory and others, by famous sires and out of real cows. Write or call. Weaver Stock Farm, Brawley, Imperial Co., Cal.

HOLSTEIN BULLS FOR SALE—Purebred, registered, fine young fellows. For years and years I have given attention to building up a herd of Holsteins. It has been my life work. Have a son of Princess Ziska, also a son of Lady Bountiful Faskie, sired by Modesto Boy. Also yearling by Constance Sir De Kol. M. A. McLean, Route 5, Modesto, Cal.

POLAND CHINA SWINE FOR SALE—Registered stock of the best strains in California. All stock sold registered. E. F. Bradley, Box 22, Hanford, Cal.

FOR SALE AT A SACRIFICE—One black 9-year-old Percheron stallion. Can be seen at San Mateo. Can also show his colts. For particulars and price write or call, A. W. Ward, Burlingame, Cal.

FARM LANDS.

LARGE AND SMALL FARMS, grain and dairy ranches for sale in Modesto and Turlock irrigation districts. Terms and prices on application. Stanislaus Real Estate Company, Modesto, Cal.

FOR SALE OR EXCHANGE.

FOR SALE OR WILL EXCHANGE for dairy or farm land anywhere in the Northwest, one lot 150x102, with modern six-room cottage, shade and fruit trees, currant and gooseberry bushes, lawn, barn, chicken house, chicken wire corral. Room for two or three cows and horses. Good water right and garden. Good sale for milk, garden and chicken products. Good schools and churches. This good home is located in Gardnerville, Carson Valley, Nevada. For further particulars address: Owner, Box 5, care The Live Stock and Dairy Journal, Sacramento, Cal.

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L. V. FLETCHER, 125 SO. COURT ST., Visalia, Cal.—Wholesale dealer in citrus and deciduous fruits, hay and grain. Largest independent hay center in Tulare County. Terms cash.

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20-acre tracts of rich, level ALFALFA LAND at Dixon. All rich, level, sediment land. Close to town. Worlds of water available for pump irrigation. School across for pump irrigation. From \$125 per acre and up. Easy terms on all of this tract. Only a few left. Write for further information.

All kinds of improved and unimproved lands for sale, suitable for dairying and alfalfa.

Write for our big list and tell us what you want. WE HAVE IT.

GEORGE X. FLEMING,
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SACRAMENTO, CAL.

The Best Posted Man in California on Sacramento Valley Lands.

THE MODESTO CREAMERY INVITES HOMESEEEKERS AND DAIRYMEN of California to visit a thriving community, where water is King, due to the best irrigation system in the West. Alfalfa flourishes in Stanislaus County and Modesto and its surroundings boasts of more purebred dairy stock breeders than any other city in California. Modesto Creamery has its own ice plant, which is second to none in the San Joaquin Valley. Lowell Gum, Manager Modesto Creamery, Modesto, Cal.

DAIRY RANCHES.

I am in position to sell you land, improved or unimproved, in the far-famed county of Stanislaus, the first in butterfat production in California. Modesto, the county seat, has many fine dairies. I have a great many listed to sell. Irrigation is a success here and water is King. No saloons in Modesto-Turlock Irrigation District. Write me. Lon J. Coffee, Modesto, Cal.

A FINE 259-ACRE DAIRY AND STOCK FARM—Well equipped, with eighty acres of alfalfa, well irrigated from ditch and electric pumping plant. Situated in Western Sacramento Valley. With or without stock. Rare chance for person looking for something good. Description and price upon application. Address Box 7, care Live Stock and Dairy Journal, Sacramento, Cal.

POSITION WANTED—A graduate of the Agricultural College of California, age 25 years, desires position on hog or dairy ranch. Will work for an interest in the business. Can furnish best of character references. Address, E. S. W., 188 Ridgeway, Oakland, Cal.

IRRIGATED LAND FOR SALE—Improved dairy ranches, 240 and 360 acres, all improved ready for occupancy, in the best section of Merced County, Cal. Also have small, highly improved ranches for sale or rent. No better land in State. J. E. Hollingsworth, Gustine, Cal.

40 ACRES WELL IMPROVED—Alfalfa, orchard and vienyard land. Also 30 acres improved near Turlock, Cal. First-class buildings. Terms upon application. K. Knutson, Turlock, Cal.

40-ACRE DAIRY RANCH FOR SALE—Irrigated alfalfa: 5½ miles northwest of Turlock, Cal. Also 4 large brood mares, weight 1300 to 2000 pounds, and 1 imported stallion. Frank Sorter, R. 2, Turlock, Cal.

ALFALFA SEED.

ALFALFA SEED FOR SALE—Crop 1912. Absolutely free from noxious seeds. Address, V. A. Peterson, Blacks, Cal.

HOTELS.

HINMAN HOTEL, LINDSAY, CAL.—Phone 344. Best Rooms. Home cooking. Auto service in connection. Transient trade solicited. Visiting homeseekers welcome. Information gladly furnished.

WHERE TO EAT.

OPERA RESTAURANT, HANFORD, CAL.—Phone Main 436 R. Meals a la carte. Private family boxes. Best of service. Prices reasonable. Stockmen welcome.

LINDSAY GRILL, LINDSAY, CAL.—Opposite depot. Meals a la carte. Private family tables. Open at all hours. Popular prices. Only first-class grill in city.

GARAGES AND AUTO LIVERIES.

COLE & READ, AUTO LIVERY—Cigar Stand and Billiard Room, 118 N. Irwin, Hanford, Cal. Auto service at all hours. Oldest established service. Stockmen's headquarters. Phone 377 J.

FORD GARAGE, TURLOCK, CAL.—Auto service at all hours. Repairs furnished for all cars. A full line of accessories. Full information to homeseekers freely given.

HARNESS OILING.

CHEAPER THAN YOU CAN DO IT—Largest harness oiling plant in San Joaquin Valley. Heavy harness washed and oiled, \$1.50 per set. Single harness, 75c. Visalia Harness Co., Visalia, Cal.

MOTORCYCLES AND BICYCLES.

TURLOCK CYCLERY, TURLOCK, CAL. Harley Davidson and Indian Motorcycle agency. General repairing and all accessories for motorcycles and bicycles. Satisfaction guaranteed. Reasonable prices.

PAINT.

GUARANTEED PAINT of all kinds at lowest wholesale prices. Our roof and barn paint is low priced and will preserve the barn or roof and make it look like new. Nothing improves a place more than painting. Write for color cards and prices. Old Hickory Supply Co., Dept. 11, 1661 Mission St., San Francisco.

The Live Stock and Dairy Journal—At a meeting of the Napa County Poultry Association of Napa, Cal., held on Saturday, October 19th, it was unanimously decided to abandon all further work on the poultry show planned for December 19th to the 22d, and do something for the utility poultry keepers on the Pacific Coast by holding a laying contest for a period of five months, commencing January 8, 1913.

The Napa Association is composed of one-third fanciers and two-thirds utility breeders, some of whom have successfully conducted poultry farms for more than twenty years, and two of those successful breeders will conduct the contest.

In our association, as in a great many others throughout the country, plans have been agitated to help the utility breeders. Complaint has been made that the fanciers receive too much attention, and the utility poultry man, who makes the fancier's efforts pay, and who constitutes the largest part of the poultry business, receives but scant attention at our shows.

We have selected an ideal location just outside the city limits, and will commence the installation of the plant immediately, so that everything will be in readiness as soon as the birds arrive on the contest grounds. We do not contemplate caring for more than one hundred pens—twenty of eight different varieties being promised at our meeting and since.

Rules and regulations governing the contest are now being prepared, and will be ready for mailing November 10, 1912. A list of cash prizes to be offered will also accompany the rules. WALLACE RUTHERFORD, Sec.

LIVE STOCK AT WASHINGTON STATE FAIR.

That the Holstein-Friesian is undoubtedly the coming dairy cow of the state of Washington was strongly indicated at the sixteenth annual Washington State Fair, which was held at North Yakima September 23d to 28th. Over eighty head of Holsteins, fully one-fourth of which number was furnished by the Hazelwood Holstein Farm of Spokane, made this one of the most interesting exhibits at the state fair grounds. One entire barn was filled to overflowing with cattle of this breed only, and Judge Hugh Van Pelt, who came to the Washington exhibition direct from judging at the Syracuse, N. Y., state fair the week before, said that the showing in Holsteins was fully the equal, if not the superior, in every respect of the display in one of the most active Holstein centers in the United States. The grand champion bull, Hazelwood Ormsby Posch (59041) he pronounced an outstanding individual in any competition, and said that the animal was superior to any that he had judged so far this year.

J. P. and E. B. Marks of North Yakima showed an exceptionally strong string, particularly noticeable for the senior hull and junior heifer calves, which received considerable praise from the judge. H. C. Davis of Granger also showed a young herd, his 2-year-old heifer showing wonderful constitution and size. He broke all records in such strong competition by winning first, second and third in junior bull calves. Joseph Tyson of North Yakima showed only two head, but his aged bull was a stylish animal, and would have won, the judge said, in almost any competition. William Todd & Sons, also North Yakima breeders, were handicapped by the fact of their cattle not being in the best of condition, but the herd showed great uniformity and constitutional vigor, and in a little better show condition would have made much better place.

It is a significant fact to be noted that the grand champion cow, Hazelwood Aggie De Kol (121440), also holds the world's junior 3-year-old record for butter production in ten days. Her record is 34.9 pounds, showing unquestionably that show type and production qualifications can be combined. Characteristics of the great hull at the head of the Hazelwood herd, Hazelwood Ormsby Posch, are depth of body, unbounded energy indicated by head and eyes, a tremendous heart girth, showing constitutional and digestive powers.

"I never saw a nicer show herd than that of the Hazelwood farm," said Assistant Superintendent A. B. Munroe of the live stock division of the Spokane Interstate Fair, who was at North Yakima trying to increase the number of entries in his division for the Spokane show. "Those twenty animals are good enough to go into the ring against the finest that any other section of the country produce, and the entire show this year, taking individuals and collective animals, is one of the best I have ever seen."

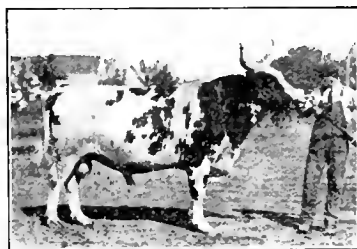
Ayrshires were represented by two of the strongest herds in the United States. W. J. Domes of McCoy, Ore., showed an exceptionally good herd for the first year in competition, while the Willowmoor Farm herd of Seattle captured most of the awards, including the grand championship on the great bull, Peter Pan, which has always been sweepstake bull in England, Scotland and America. This animal was showing at the Washington Fair in fully as good condition, according to critics, as when it was grand champion at the National Dairy Show at Chicago last fall.

There was little competition in Guernseys, but the excellence of the only herd in the show, that of D. H. Looney of Jefferson, Ore., was shown by his winnings against the strongest

of competition at the Oregon State Fair at Salem. His winnings at the Washington Fair were numerous.

The general excellence of the exhibits in these three breeds was greatly enhanced by the presence of three great dairy bulls, one of each breed—Peter Pan of the Ayrshires, Hazelwood Ormsby Posch (59041) of the Holstein-Friesians, and Golden Prince of Oregon (11912) of the Guernseys, each a champion and grand champion of his breed. Judge Hugh Van Pelt pronounced these three animals the greatest of their respective breeds that he had ever judged, and made the comment that none of their owners need hesitate for a moment to enter his animal against the strongest of Eastern competition.

In the Jersey class there was only on herd entered, that of Burt Pease of the Electric Light Farm of Ellensburg, Wash., but a distinctive feature of the



Peter Pan, Grand Champion Ayrshire Bull at Washington State Fair, 1912. Owned by Willowmoor Farm, Seattle, Washington.

awards was the fact that his Gertie's Brown Lad (67362), born and bred in the state of Washington, won the grand championship over Oxford Rosarie (103120), an imported bull sired by G. F. Prime's Oxford and purchased by Mr. Pease from G. H. Sweet of the Beechland farm, East Aurora, N. Y. Oxford Rosarie was good enough to win first in the senior bull calf class and the junior championship, but Gertie's Brown Lad took first in the bull class, 3 years old or over, the senior championship and the grand championship. Mr. Pease entered eleven head, all of which won places, and his



Golden Prince of Oregon (11912). Grand Champion Guernsey Bull at Washington State Fair, 1912. Owned by D. H. Looney, Jefferson, Oregon.

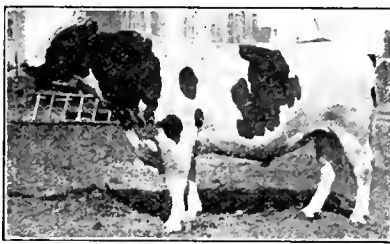
winnings will undoubtedly serve to stimulate the interest of Washington breeders in the fair, because of the fact that heretofore Oregon breeders have almost invariably taken most of the prizes.

There was not much competition in beef cattle. George Chandler, a Hereford breeder of Baker City, Ore., was strong in this department, and had a better lineup of animals than last year. His aged cow, Jewell (294343), which won first at Spokane in 1911, was in splendid shape and could give an account of herself in any competition.

Superintendent C. F. Monroe of the live stock department of the fair attributes the falling off of interest in the horse department to the general adoption of motor driven vehicles and farm implements. One exceptionally good entry was that of Bold Warrior (12931), a gray English Shire stallion foaled in 1908, which was first, champion and grand champion at the show, owned by George Woodward of Sunnyside, Wash. The pony exhibit was a

large one, and some of the entries would have won in strong Eastern competition.

The feature of the hog show was the winning of the silver cup offered by President Howard Elliott of the Northern Pacific Railroad for the best herd of swine of any age or breed, owned and bred by exhibitor, by Barrows & Davenport, Berkshire breeders of Clover Leaf Farm, Crabtree, Ore. The widest interest among both Washington and Oregon breeders had been taken in the cup award, and six herds were entered in the competition against the Berkshires. The winning four was made up of a boar, Lester Lee, and three sows, Oregon Lester Ladies 1st, 2d and 3d, all sired by Hopeful Lee and out of sows bred for the present owners by Hibbard &



Hazelwood Ormsby Posch (59041). Grand Champion Holstein Bull at Washington State Fair, 1912. Owned by Hazelwood Holstein Farm, Ferry, Washington.

Baldwin of Bennington, Mich. In addition to the sweepstakes, Barrows & Davenport won twelve firsts, five seconds and three thirds, two championships in boars, one of which was in open class, and one championship in sows.

W. H. White of Sunnyside, Wash., entered thirty-nine head of Duroc-Jerseys, including ten pigs, and took all four firsts and three seconds on herd, ten firsts and five seconds on individuals, two championships each, one of which was in open class and the equivalent of grand championship, on



Royal Lee VIII (143877). Grand Champion Berkshire Boar at Washington State Fair, 1912. Owned by Barrows & Davenport, Crabtree, Oregon.

boars and sows, and the first prize of the National Duroc-Jersey Record Association for boar and three sows owned by exhibitor.

Another notable exhibit was that of L. H. Linbarger of North Yakima, Wash., and his winnings on Poland Chinas, and these of Mr. White, will undoubtedly tend to stimulate the interest of Washington breeders in next year's show, as heretofore, in hogs as well as in cattle, Oregon breeders have carried away most of the prizes.

The exhibit as a whole was about equal to that of last year. The dropping out of H. W. Domes of McCoy, Ore., who has been an exhibitor for several years, and of A. D. Hudson of Tangent, Ore., who won at the Salem, Ore., state fair, the Vancouver, Wash., Clarke county fair and the Walla Walla, Wash., Walla Walla county fair, but who sold out practically his entire herd at Walla Walla, was felt, but the increased entries of other breeders, notably in the Berkshire and Duroc-Jersey classes, more than made up the difference.

ANOTHER RICHLY BRED HOLSTEIN BULL AT MODESTO.

Frank Hatch recently purchased from Stevens Brothers, Liverpool, N. Y., an exceptionally well bred bull in King Pontiac Netherland Segis, who is also an individual of high merit.

His ancestors include such noted individuals as King of the Pontiacs, Pontiac Komdyke, Hengerveld De Kol and others.

The sire of King Pontiac Netherland Segis is King of the Pontiacs, the only sire of the breed having two 3-year-old 30-pound daughters. His daughters hold world's records in eleven different classes.

The dam of King Pontiac Netherland Segis is King Segis Pontiac Netherland. Her sire is King Segis Pontiac, a son of the great King Segis, and of Pontiac Clothilde De Kol 2d, whose great year's production of 25318 pounds of milk and 1271.6 pounds of butter is still fresh in the minds of the dairy world.

The development of this bull by Mr. Hatch will be watched with interest by the Holstein breeders of the coast.

KINGS COUNTY POULTRY AWARDS

BARRED PLYMOUTH ROCKS.
M. Bassett—Cock, 1st; hen, 1st, 2d, 3d; cockerel, 1st, 2d, 3d; pullet, 1st, 2d; pen, 1st, 2d.

WHITE PLYMOUTH ROCKS.
G. L. Meadows—Cock, 2d; hen, 3d; cockerel, 1st, 2d; pullet, 2d.

B. P. Shirk—Pen, 2d; hen, 2d; pullet, 3d.

Raymond Rotts—Cock, 1st; cockerel, 1st, 2d; pullet, 2d.

BROWN LEGHORNS.
Mrs. E. F. Bradley—Hen, 1st; pullet, 1st.

WHITE LEGHORNS.
A. R. Price, Armona—Pen S. C. White Leghorns, 1st; hen, 1st, 2d; pullet, 1st, 2d; cockerel, 1st, 2d.

F. E. Bonestell—Pen, 2d; cock, 3d, 2d; hen, 3d; cockerel, 2d; pullet, 3d.

BUFF LEGHORNS.
G. L. Meadows—Cock, 1st; hen, 2d; cockerel, 1st, 2d; pullet, 1st, 2d; pen, 1st.

BUFF ORPINGTONS.
G. L. Meadows—Cock, 1st; hen, 2d; pullet, 1st, 2d; cockerel, 2d; pen, 1st.

W. L. Peers—Pullet, 2d.

BLACK ORPINGTONS.
Mrs. E. F. Bradley—Hen, 1st; pullet, 1st, 2d; pen, 1st.

G. L. Meadows—Cock, 2d, 3d; hen, 2d; pullet, 3d; cockerel, 2d; pen, 2d.

F. Griffith—Cock, 1st.

W. L. Peers—Cockerel, 3d.

WHITE ORPINGTONS.
R. W. Merrill—Pullet, 1st, 2d.

WHITE MINORCAS.
B. P. Shirk—Pen, 1st; hen, 1st, 2d, 3d; cockerel, 1st; pullet, 1st, 2d, 3d.

BLACK MINORCAS.
M. Bassett—Cockerel, 1st.

SILVER-LACED WYANDOTTES.
W. F. Heusel—Pen, 1st, 2d; pullet, 1st, 2d; cockerel, 1st; hen, 1st, 2d; cock, 1st.

PARTIDGE WYANDOTTES.
B. P. Shirk—Cock, 1st; hen, 1st, 2d, 3d.

RHODE ISLAND REDS.
Henry E. Hill—Pen, 2d, 3d; pullet, 1st, 2d, 3d; cockerel, 1st, 2d; hen, 2d, 3d.

Raymond Rotts—Pen, 1st; cockerel, 1st, 2d; hen, 1st.

BLUE ANDALUSIANS.
Mrs. E. F. Bradley—Pullet, 1st; hen, 1st; cock, 1st.

BUFF WYANDOTTES.
W. F. Heusel—Cock, 1st, 2d; pen, 1st, 2d; cockerel, 1st; pullet, 1st, 2d.

COLUMBIAN WYANDOTTES.
Mrs. T. J. Gilkerson, Stratford—Cock, 1st; hen, 1st, 2d, 3d; pullet, 1st, 2d, 3d.

CORNISH FOWLS.
M. A. Hill—Cock, 1st; hen, 1st, 2d; cockerel, 1st; pullet, 1st, 2d, 3d; pen, 1st.

J. B. Meadows—Cock, 2d, 5th; hen, 3d.

CICILIAN BUTTERCUPS.
J. A. Crawshaw—Pullet, 1st; cockerel, 1st; pen, 1st.

MONGOLIAN PHEASANTS.
J. A. Crawshaw—Pair, 1st.

MOTTLED ANCONAS.
J. B. Jessup, Bakersfield—Cockerel, 3d; hen, 2d; pullet, 1st, 2d; breeding pen, 2d.

J. A. Crawshaw—Pen, 1st; cockerel, 1st, 2d; pullet, 3d.

G. L. Meadows—Hen, 1st.

WHITE WYANDOTTES.
W. F. Heusel—Cock, 3d; hen, 3d.

E. E. Ford—Cock, 1st, 2d; hen, 1st, 2d; pullet, 1st, 2d; cockerel, 1st, 2d; pen, 1st.

SILVER-SPANGLED HAMBURG.
J. B. Meadows—Cock, 3d; hen, 2d; pullet, 3d; cockerel, 3d.

Henry E. Hill—Cock, 1st, 2d; hen, 1st, 3d; cockerel, 1st, 2d; pullet, 1st, 2d; pen, 1st, 2d.

BANTAM COCHINS.
B. P. Shirk—Cock, 1st; hen, 1st, 2d, 3d.

BROWN LEGHORN BANTAMS.
W. F. Heusel—Cock, 1st; hen, 1st; pullet, 1st.

BANTAMS.
A. E. Clow—Hen with chicks, 1st, 2d.



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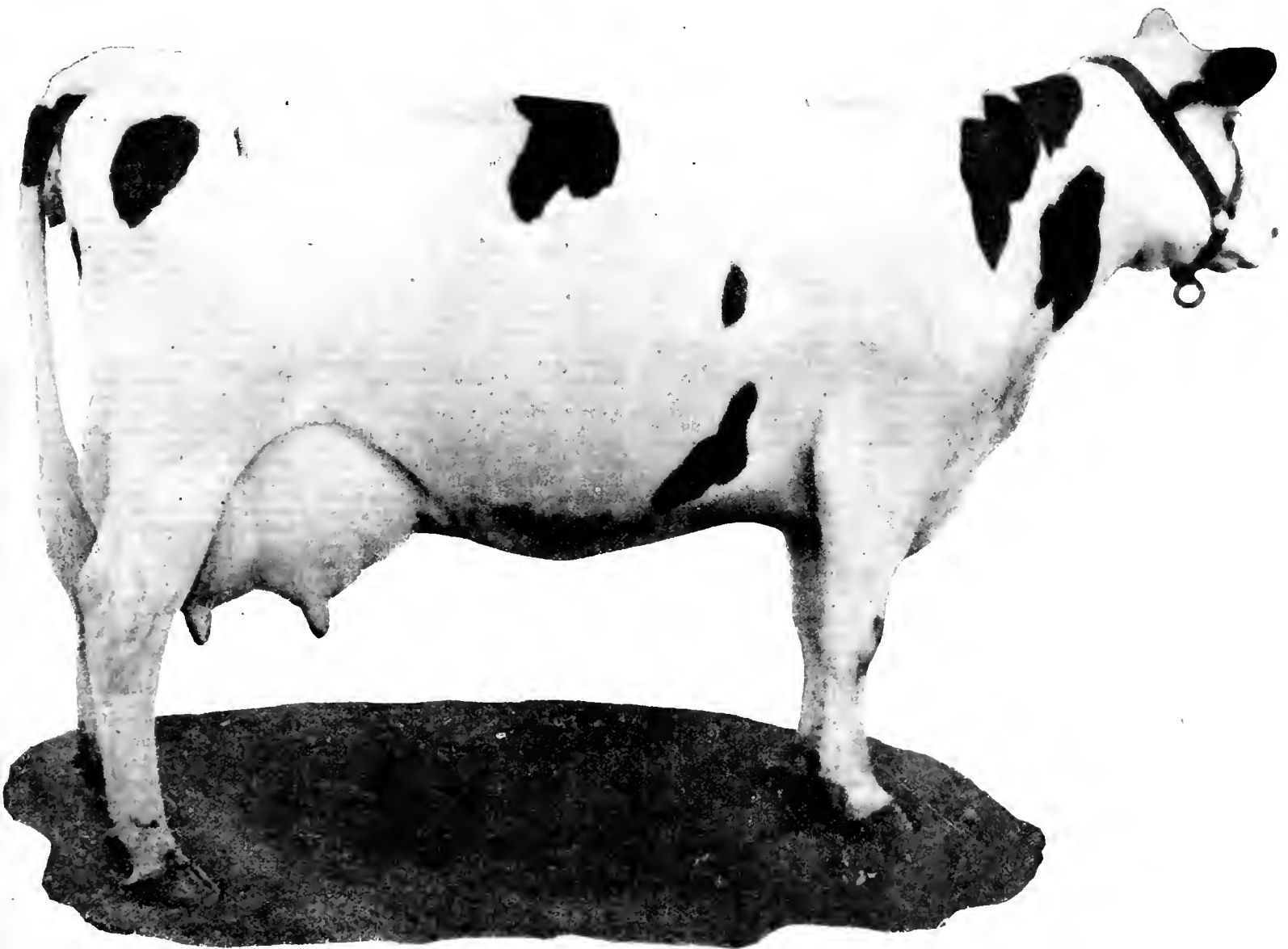
PRICE, TEN CENTS

THE LIVE STOCK ***and DAIRY JOURNAL***

FOR BREEDER, STOCKMAN, DAIRYMAN, POULTRYMAN and FARMER

ELEVENTH YEAR

DECEMBER, 1912



STAFFORD MERCEDES AAGGIE TUEBIE

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AGRICULTURAL PUBLISHING COMPANY, SACRAMENTO, CAL.

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NEW DEAN OF CALIFORNIA AGRICULTURAL COLLEGE.

On Wednesday, November 20th, Thomas Forsyth Hunt was invested Dean of California Agricultural College, and Director of the State Experiment Station.

At a special meeting attended by live stock breeders held in the auditorium of the newly dedicated Agricultural Hall, Dean Hunt attempted to obtain an expression of the general opinion as to the manner in which to expend the remaining \$5000 of the State money appropriated for the purchase of live stock for the State Farm at Davis.

The meeting was a success so far as bringing out opinions of a widely different nature, but the question was still left undecided as to whether to go out and buy a few individuals of the highest excellence of type and quality, or whether to use the same amount of money in purchasing a larger number of purebred animals of less than the highest quality, and to use these animals both as a foundation upon which to build and as subjects for experiments in feeding and care.

From Dean Hunt's remarks it is quite evident that he appreciates the great benefits to be derived from the State Farm by all growers of live stock in the State in the way of definite information on the results of feeds and feeding as applied to conditions peculiar to California.

The tremendous interest now being displayed by thousands of California farmers in the live stock industry indicates some busy years ahead for those connected with the Animal Husbandry Department of the State Agricultural College, but it is a work which, if well done, will meet with greater public approval than any other branch of work now being carried on by the college.

California Purebred Sire League

—For—

Promoting the More General Use of the Purebred Sire on California Farms.
R. D. McFARLAND, Secretary,
423 J Street, Sacramento, Cal.



Pledge Cards of the Purebred Sire League will be sent to any address upon application to the Secretary.

The pledge is as follows:

- (1) To use none but a Purebred Sire in the breeding of all farm animals.
- (2) To advocate the general use of Purebred Sires.
- (3) To work for the betterment of Purebred Sires in breed character, individual excellence, soundness and prepotence.
- (4) To discourage the use of grade, mongrel or scrub sires, and all dams, irrespective of breeding, that are diseased, hereditarily unsound or otherwise unfit in conformation and character.

The California Purebred Sire League is part of a plan of national scope for the improvement of farm live stock through education and promotion. It is a voluntary, non-incorporated organization, and until a large membership is obtained there will be no elected officers. It is planned to eventually effect a permanent organization, which will take up such additional work along the lines of live stock improvement as the members may deem advisable.

Every person interested in promoting the more general use of purebred sires, and the consequent improvement of all classes of live stock, is invited to become a member. The only requirement for membership is to sign the pledge of the League, which is as follows:

I hereby pledge myself:

- (1) To use none but a purebred sire in the breeding of all farm animals.
- (2) To advocate the general use of purebred sires.
- (3) To work for the betterment of purebred sires in breed character, individual excellence, soundness and prepotence.
- (4) To discourage the use of grade, mongrel or scrub sires, and all dams, irrespective of breeding, that are diseased, hereditarily unsound or otherwise unfit in conformation and character.

If you approve the plan and wish to help in accomplishing its objects, write the Secretary for a supply of pledge cards, one of which you will sign and return. Explain the purposes of the League to your neighbors and friends, and get as many as possible to sign a pledge card and assist in the good work. Literature bearing upon the value of purebred sires in the breeding of live stock is being compiled, and members will be asked to assist in the distribution of the same in their respective communities. In addition, a press bureau will be maintained, and all possible publicity will be given the work of the League, with a view of educating the farmers of the State as to the value of purebred sires.

The co-operation of all persons interested in raising the standard of farm live stock is solicited.

Pat on the Spot.

We are in favor of the California Purebred Sire League. If there is anything we can do to help the good cause we're "pat on the spot." It should be pushed to a finish.—H. P. Slocum & Sons, Glenn County, Cal.

There is such an overwhelming mass of evidence to be had as to the value of purebred live stock, especially of the purebred sire, that it is hard to conceive how so many farmers continue to breed indiscriminately year after year and to feed and care for scrub and mongrel stock when the same amount of feed and care bestowed upon improved stock would re-

turn largely increased profits. Many general farmers look upon purebred stock only as something fancy, well suited, perhaps, for a rich man's hobby, but not possessing utility value that make it profitable for the man of moderate circumstances.

It is due to ignorance that they fail to realize the benefits to be derived through grading up their stock. Many of them do not know that the consistent use of purebred sires will eventually raise the standard of a very ordinary herd of dairy cows to a point where they become 99 per cent pure blood.

We have selected from our exchanges two clippings emphasizing some of the points that we wish to illustrate in this instance. One Eastern farmer who was asked how he happened to become interested in grading up his dairy stock said that it was one sentence in a dairy paper that started him working along the right lines. The sentence was: "A purebred bull is a great educator to the farmer."

"The sentence hit me hard and kept sticking in my memory," he says. "I made up my mind I would try it, so I bought a purebred bull and commenced going to school. The first thing he educated me in was the matter of a pedigree. I had never owned an animal that could get a pedigree if it was wanted ever so bad. The pedigree taught me about blood lines and for the first time in my life I became interested in looking up the family history of one of my farm animals."

"I had never paid much attention to the qualities of the particular breed of my bull. But I was interested in knowing something about them. I did not know one breeding principle from another; indeed, I knew practically nothing of the art of breeding farm animals. But I couldn't afford to keep an expensive bull and remain in ignorance, so I went to reading up on that matter. When the heifers of my bull were a year old I saw at once their superiority to the dairy standpoint."

"When they came in milk they were a long way ahead of their mothers. Now having improved cattle with some of the ideas that go with them, my mind began to broaden and I took up a lot of ideas that I scarcely dreamed of when I was working down on the scrub line. A farmer never knows exactly how he gets his education. And he don't know how he don't get it, either. But I will say this, that if a farmer will put himself in the way of good things they will educate him before he scarcely knows it. Such a farmer will surround himself with good stock, good buildings, good books and above all a good dairy paper."

"Of course, all these things took me into a different class of farmers, men who had good stock and who talked good stock. Then followed better ideas about stabling, care and feeding

and it was not long before I was on another road entirely.

"Let me tell you there are ten dollars to be picked up on this road where you will find one on the old road."

The other example is the story in a southern paper of a poor school teacher who decided to make a start in Jerseys by buying a purebred cow for \$27.50. We quote portions of his story:

"I bred her to the best bulls in Col. W. B. Montgomery's herd, and her heifers to the College bulls. She was predisposed to bring heifer calves and proved to be a great cow. I have milked 40 pounds of 50 per cent milk from her in a day. She averaged 38 pounds for six weeks on grass alone. I always want everything to pay for its keep and its purchase price first, then I feel that what is left is profit. I have, therefore, sold some of her offspring. In fact, I have sold \$1850 worth of stuff off of her and her descendants and now have ten head of her grandchildren left; besides, she will soon freshen again. From her look she is likely to bring me a half dozen calves yet. This has been done in town. I live in the corporate limits and have raised these animals in an eight-acre lot.

"You will experience many losses in this as well as in other lines of work. But, in spite of losses and hard work and worry, there is a margin of profit, and I think the greatest good to the breeder comes in that mental training, study and conjecturing which comes in trying to develop an offspring superior to its parents, and in trying to so handle the heifers and cows in milk as to get the maximum yield from minimum cost of bought feeds. You positively cannot be a progressive breeder without lifting yourself into scientific farming methods.

"Breeding the best blooded live stock develops the reddest blooded, grayest brained farmers. So, young man, get you some registered animals, if nothing but registered dogs, and make your stock the best in your neighborhood, and soon the buying public will make a path to your place, even though it be far removed from the noise and hurry of the city or distant from the seats of learning."

Many of the readers of the *Journal* could relate experiences similar to the above if they would take the trouble to sit down and write about them. We should be very glad to hear from any one on the subject.

BARRENNESS.

We are sometimes asked for a good remedy for barrenness or failure to breed, and it has always seemed to us that the question could best be answered by a practical breeder who has had barren animals in his herd, and has found a successful remedy. Such a breeder is Mr. C. I. Hood, the proprietor of Hood Farm, Lowell, Mass. He has been breeding Jerseys for more than twenty years, and has had a wide experience with many diseases of cattle and swine. Mr. Hood declares that more than ninety out of every hundred cases of barrenness can be cured by the use of Hood Farm Breeding Powder, and he bases this statement on his own experience and on the reports made to him by breeders in all parts of the country who have used the Breeding Powder successfully. If any reader owns animals that fail to breed, we suggest that he write to C. I. Hood Co., Lowell, Mass., stating his case and mentioning this paper.

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THE LIVE STOCK and DAIRY JOURNAL

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Dairy and Poultry
Magazine of the
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Established 1901

Volume 11

SACRAMENTO, DECEMBER, 1912

Number 1

LIVESTOCK BREEDING USEFUL AND PROFITABLE

(Address by W. J. Kennedy, Iowa State College, before the Interstate Breeders' Association, Sioux City, Iowa, 1912.)

This is a day and age of agricultural development. People, in all vocations of life, are manifesting an unusual interest in the farm and its products. This is as it should be. Every human being is more or less dependent upon the farm. We can never give too much attention to the study of agriculture. From a humane standpoint it is necessary. Before the middle of the twentieth century the farmers of this country will be called upon to feed at least one hundred and fifty millions of people. This problem can only be solved by a more intensified form of agriculture.

As an American people we are a nation of meat eaters, not vegetarians. This being true, we must not neglect our live stock industry. It is up to us to produce the beef, pork and mutton products demanded by our people. In the past this has not been a difficult problem. In the future it is going to require business methods on the part of the producer. Both the land and feeding stuffs used are sure to be higher in price. The finished product can not go much higher. This means either more pounds of edible meat from a given amount of food fed the animal, or a loss to the producer. This can only be secured through a more careful and intelligent system of breeding and selecting domestic animals. The "scrub" animal, whether pedigreed or not, must be obliterated.

There always has been and I believe there always will be in our agriculture a place for each and every class of live stock. We must have horses, beef cattle, dairy cattle, sheep and swine. The man who breeds the right kind of animals of any one of the above mentioned classes will always find his work both useful to the community and profitable from his own standpoint. We need them all in our farming operations. Some will succeed with one class of stock and make a failure with another, and vice versa. The real secret of success in any line of work depends a great deal upon the amount of individual attention given it. The amount of enthusiasm and interest which any particular individual will give to any line of work will always be governed very largely by his own likes or dislikes for the same. This being true, each man had best select and breed the class of stock which appeals to him most strongly. Where such a system is adopted success usually follows.

For over twenty years I have studied carefully the methods pursued by breeders of live stock, both the successful and the unsuccessful. The former are decidedly few in number compared with the latter. It has been my good fortune to have had the opportunity of observing the methods pursued on the best farms in the United States, Canada and eleven different European countries. I am frank to say that in no other line of work is a well-defined purpose so necessary as in the successful breeding of live stock. Each

and every one of our present day breeds of live stock was brought up to its very highest degree of excellence by the sheer determination to carry out a well-defined purpose on the part of some two or three men. It is true that hundreds and thousands of men were breeding, but only two or three in each instance really succeeded. Why did the others fail? Simply because they were like the man walking slowly along the public highway and, when stopped by a stranger who asked him: "Where are you going?" and his reply was:

"Don't know, but I am on my way."

It is just so with a great many breeders of stock. They don't know where they are going, but they are on the way—too often on the road to failure.

No man ever has succeeded, and no man ever will succeed for any length of time in breeding live stock who does not have as his slogan that one word "utility." Almost a century ago, Amos Cruickshank, "the herdsman of Aberdeenshire," said that "the real test of value in beef cattle is their ability to turn straw, turnips and cake into pounds, shillings and pence at a profit."

When ridiculed by his fellow breeders because he overlooked fashionable pedigrees and color markings, he replied that the only question in his mind was: "What is best for our country, our agriculture and our people?"

It would be a Godsend to our American live stock interests if we had today a thousand Amos Cruickshanks, so that we might put one in each of the thousand counties which constitute our corn belt states. The useful animal has always been a moneymaker and will continue to be so in the future.

No man ever has succeeded and no man ever will succeed for any length of time in breeding live stock who attaches his kite to "fadism."

We do not need to mention any one particular individual to demonstrate the folly of such work. There is hardly a county in any live stock section of this country or any other country which has not anywhere from one to twenty men who have clearly demonstrated that "fadism" is always a forerunner of failure. By "fadism" I refer to the tendency on the part of many men to disregard the really useful features on an animal and go to the extreme on certain blood lines, color markings, shape of ear, head, etc. I do not wish to be understood as being opposed to beauty of form, color or general appearance. I am not. In fact, I always like to see the same when combined with the utility points. But if I had to sacrifice something in selecting a breeding animal it would be the fancy points and not those which indicate individual utility.

The longer I study and handle live stock the more I am convinced that the first and most important point to be observed in all meat and milk producing animals is a good middle. The signs of constitution and digestive capacity present their most visible manifestations in the body and not in the extremities. The animal is simply a

machine to convert fed into more edible products, such as meat and milk. Its capacity is governed almost solely by the size of the middle. These are points which mean dollars and cents to every man who handles live stock.

We must pay more attention to the question of size and vigor in our animals. Size always has and always will be a vital point. It is usually associated with heavy and economical gains. Vigor is absolutely essential. It is associated with heavy gains and also helps to safeguard the animal in time of disease outbreaks. One of the chief causes for deterioration in both size and vigor of our animals is the use of immature sires and dams for breeding purposes. While both sire and dam exert an influence, it has been clearly proven that the immature dam is the most detrimental to progeny. The continued use of immature sires and dams, especially where corn rations are fed, will seriously reduce both the size and vigor of any breed or class of live stock. Anything which lessens the size and vigor of the animal renders it less profitable on high-priced land. Too much attention cannot be given to the importance of selecting breeding stock from mature parents. In this way, and only in this way, can we retain size and vigor in our herds and flocks.

The man who succeeds in breeding draft horses must ever keep in mind size, quality, feet, legs and action. These are all utility points. The markets demand horses weighing 1700 pounds and upwards, that have good body conformation, large feet of good texture, strong, clean bone, large, sound joints, heavy muscular development combined with good, straight, snappy action. Such horses command high prices and are very scarce. The statistics for the year 1911 show that only one horse out of every twenty sold at our leading horse markets filled the bill. This is surely a good line of work to pursue for many years to come. The vast majority of our farmers make a serious mistake when they sell their good draft mares to go to the cities. A good draft mare is worth twice as much on any farm, if she is used for work and breeding purposes, as she will sell for in any market. Only mares of good weight, body conformation and absolutely sound should be retained for breeding purposes. It is very important that the stallion used should be sound, drafty, stand well on his feet and legs, short and straight in his back, heavily muscled and show good disposition as indicated by width and flatness of head between the eyes. Avoid unsound, small footed, light boned, crooked legged or shallow bodied stallions.

The profitable beef animal of the future must have size, large heart girth and middle, giving him constitution and capacity. He must also be low set, straight in his lines, back and loin and carry a good covering of natural flesh over these parts. The head must be short and wide between the eyes, the neck short and shoulders smooth on the sides and wide on top. Width on the top of the shoulders

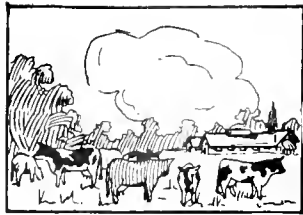
goes with good fleshing properties throughout. The hide should be soft and pliable. These are all utility points. We must ever keep the blood type in mind, because the blood is the ultimate end of all beef cattle.

In selecting dairy cattle it is always difficult to judge accurately with the eye. The real test must be the weighing scales and the Babcock tester. The cow is a machine to convert food into milk; thus she must have a large middle and a strong constitution to insure best results. She must also have a large udder, large milk veins, large crooked milk veins and good sized teats. Her head should be level and angular in appearance, with the eyes standing out prominently. The neck should be rather long and level in appearance, the shoulders pointed and the backbone rather prominent. The skin should be loose and soft to the touch. In selecting herd bulls either mature animals which have already demonstrated their worth as sires or younger animals from high testing dams and sires only should be used. Remember that the best and surest results will always follow the use of a mature sire which has sired heifers with good records. A good dairy bull should be kept until he is 12 or 15 years old. In fact, as long as he is a sure sire. Real good sires are so rare that when we do find one he should die only of old age. All breeders of dairy cattle should secure yearly tests on each and every cow in the herd. Shorter tests do not really mean very much. It is the cow that stays by her job that is really valuable.

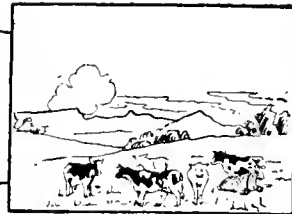
Few lines of work offer greater financial returns for the capital invested than a good flock of breeding sheep. This is especially true where good mutton conformation is combined with a long, dense, fine fleece. The question of constitution is very important in sheep. In selecting ram blockiness, low-setness, wide back, loins and heavy, well-filled hind quarters should always be demanded. The head should be broad and masculine in appearance, the neck short and the shoulder broad and compact. The legs should be short and straight, especially at the hocks. The skin should be pink in color, and the fleece long, dense, fine and uniform on all parts of the body. Too much attention cannot be given the importance of density of fleece. It insures heavier clip of wool, protects the sheep from rain, snow and cold weather and also sheds chaff and other foreign material so detrimental to the wool.

Breeders of hogs will do well to pay more attention to the utility end of the business and much less to the fancy end, as illustrated by the pedigree craze, shape of head, ear, nose, disc of face, etc. The one great need today in the hog business is a hog with size, quality and prolificacy combined with early maturity. Such a hog best described as the kind that never lies to the Assessor; that is, he is born after the Assessor is around the

(Continued on page 10, column 3.)



THE DAIRY



Dairy Inspection as a Means of Raising the Standard of Dairy Products

C. A. Starkweather, a California State Dairy Inspector, made an address on the subject of inspection at the recent convention of the California Creamery Operator's Association, wherein are expressed many good suggestions of interest to dairymen in general. The address is here reproduced in full:

"The subject of 'Inspection' has been assigned to me by your program committee, and however inefficiently I may be able to handle this subject, I assure you my earnest desire is and at all times has been to help improve quality of the dairy products of the San Joaquin Valley, and particularly Stanislaus and Merced Counties, that they shall not alone be known as among the largest producing counties in the State, but of the highest grade as well, and all criticisms of and suggestions for the betterment of existing conditions and methods are made after careful observation and study of these in the field, visiting hundreds of dairies, all the creameries and receiving stations, milk depots and other places where dairy products are handled and sold in all the cities and towns.

"The Inspector is not alone an officer of the law, to enforce the same, but should be capable to instruct in the requirements of the dairy laws, helping the dairymen in every way with counsel and advice, to correct errors in handling his herd and its products, and to improve the sanitary conditions of all his dairy buildings and utensils, that they may comply with the requirements of the law, a copy of which we have endeavored to place in every dairyman's hands.

"With the creameries and receiving stations also he finds necessity for friendly criticisms and consultation and suggestions for changes in methods that will more fully comply to the law, and consequently improve the finished product.

"The retailing of milk, cream, ice cream and butter, serving of milk at restaurants and hotels, claim his attention, advice and criticisms.

"Water never rises higher than its source. Butter can be made no better than the milk and cream that is received from the dairies. The primary work, therefore, is with the visits to the individual dairies. At each dairy visited a score card is filled out, scoring for equipment (buildings, construction and location, utensils, construction and quality) and for methods in caring for the equipment from a sanitary standpoint.

"Many new dairies have been started in the past year in the Modesto and Turlock districts, and while a few, from limited means, have put up only temporary dairy buildings, not altogether sanitary and in compliance with the law, the most of them have shown a marked improvement in construction, light, ventilation, proper protection against flies, cement floors and proper drainage. Barns are much more sanitary in construction, and a large majority of the dairy cows are milked under cover the larger portion of the year.

"More attention is being paid to properly constructed stable floors, drainage and the daily removal of manure to the proper distance and discontinuing the practice once so prevalent of cleaning the stable by piling

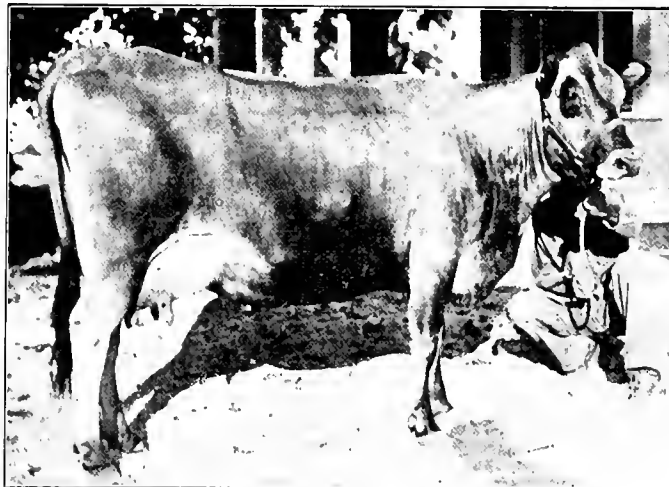
the refuse through the windows in the walls of the stable, allowing it to remain there as an excellent fly incubator.

"On the West Side, where dairying has been carried on longer, a fewer number of new dairies have been started, but most are on a larger scale and the equipment is being put in first-class.

"A marked improvement has been made in whitewashing buildings and bettering conditions.

"Here the tenant system prevails to a greater extent than about Modesto and Turlock, and many owners seem to expect the tenant to meet the requirements of the dairy law as to barns and dairy rooms at his own expense. This, for a man having a two or three-year lease and paying a high rental is a hardship, and he generally

correct, as many of the dairymen justify themselves because they have small dairies and the separator does not seem to them to be very unsanitary from once using, therefore do not take it apart at night, forgetting that the majority of the cream gathered in his neighborhood is from similar small dairies, following the same practice, consequently much of the cream sent to the creameries has an advanced bacterial development. This is, in some places, quite a general practice, and I am often told: 'I am doing as well as my neighbors are. You will not find anyone taking the separator apart and washing and sterilizing it but once a day, and anyway we deliver a pretty good cream. The creamery never objects to it.' This last is quite true, as under the present keen competition for cream by creameries and receiving stations any one of them alone demanding a better product would face a loss of many patrons to competitors making no such demands.



WANDA OF VENADERA (208645), A. J. C. C.

First prize and senior champion Jersey cow at California State Fair, 1912. Winner of second premium in butter-fat test, with 12.42 pounds fat in 5-day test. Owned by Guy H. Miller, Modesto, Cal.

sidesteps the requests of the inspector as long as he dares, hoping to get the owner to come through and put the buildings in shape. This the owner often fails to do.

"I should like to see the law so formulated as to place the burden of responsibility of sanitarily constructed dairy buildings upon the owner of the properties rented for dairy purposes.

"Where equipments and methods, one or both are bad, and there seems to be a question in the mind of the Inspector as to prompt compliance to his instructions, a Sanitary Notification is served, this being a legal notice limiting the dairyman to thirty days in which to make corrections. The majority of those so notified have complied more or less thoroughly. Quite a number, however, have paid no heed and prosecutions have followed.

"A large percentage of the cream that arrives at the creameries in bad condition is directly traceable to failure in thoroughly washing and sterilizing all buckets, cans and separator parts after each using. And if the cream is of low test, as much of it is, it is that much worse for the bacterial development from unsanitary conditions. This is one of the most difficult conditions for the Inspector to

Notwithstanding the existence of these conditions among some dairies, the general sanitary conditions are improving, and the thoughtful, ambitious dairymen are improving their dairy stock, buildings and methods.

"On the West Side, at Newman, Crows Landing, Gustine and Los Banos there has developed a large trade in pasteurized sweet cream, meeting the demands for a fine article for city consumption, by offering a substantial bonus above the regular price paid for churning cream. This must be a strictly sweet, clean, high-testing cream, delivered twice daily during the hottest summer months. Many dairies have installed water coolers, paid close attention to sanitation and cleanliness and are delivering the goods very successfully.

During the past summer as high as two hundred ten-gallon cans of a 38 per cent cream, pasteurized and sweet, was available for shipment daily in this territory, clearly demonstrating that fine cream can be produced in the hot interior valley with proper effort and care, backed by the encouragement of the extra price. What has been done for the sweet cream trade can and should be done for all cream used for the manufacture of butter.

"I should like to see the local cream-

eries and receiving stations adopt a uniform system of grading cream according to test, cleanliness and acidity, and pay for it strictly according to grade, and absolutely refuse to receive low testing, over acid, putrefactive or dirty cream, and I will guarantee that in very short order you will be receiving a grade of cream from which your butter-maker will make "extras" all the time, and he will not be compelled to resort to the use of lime or other chemicals to correct over acidity before pasteurizing or churning. Nor will you be paying the same price to a patron who delivers a bad cream, so unfit for use that it is dumped down the sewer, and for fear of losing his patronage nothing is said. When the dairyman who has been guilty of delivering a poor cream the possibility of marketing it is gone, he will at once remedy the faulty methods productive of such cream or go out of business, as he should if unwilling to follow the simple rules of sanitation.

"Quick delivery of cream from dairy to creamery is essential for quality of the butter made, therefore, some way of avoiding the excessive expense of gathering the cream should be devised to get the maximum load to the creamery or station at the minimum of expense and time.

"Wagons being on the road in the hot summer weather all day until 3, 4, 5 and even 6 o'clock before arrival at the creamery, cannot avoid being a positive injury to the quality of cream for churning. It is also an injustice to the patron who does deliver a good cream to the wagon early in the day. All cream should be into the creamery or station by noon and not later than 2 p. m. under any consideration.

"An early delivery daily by each dairyman would be the best for the quality of the cream, if properly covered while in transit, but in many localities probably would not be practical. Another method would be corporation of all the dairymen in a given territory convenient to make a good load, contracting this load for all agreed time, at a fixed per cent above quotation, the creamery making the highest bid, getting the cream, the dairymen arranging to gather and transport to the creamery or station daily, as early as possible. And still another method is that one wagon and driver gather all the cream in a given territory, transport to the central point and deliver to the creamery or station designated by the patron. In this way a full load will be obtained by covering fewer miles, and all cream should arrive at the creamery much earlier in the day and in far better condition for making butter. Sampling and weighing by the driver could be done just as well for all the creameries as now is done for the individual creamery.

"At Dos Palos the last plan is working out quite successfully. One wagon and driver gathers cream for two different stations, and picks up all the cream on his route, delivering the cream before noon at much less cost per pound of butter-fat than at other points where the cream does not arrive at the creamery until late in the afternoon.

"There may be difficulties in working out the details, but not so great but they could be adjusted. The benefits in quality of cream, shortening time in delivery and reduction of expense would seemingly make it well worth consideration."

MORE GOOD HOLSTEINS FOR STANISLAUS COUNTY

The Live Stock and Dairy Journal—Regarding my recent trip East it affords me great pleasure to be able to do something for the Holstein-Friesian cow and tell you of some of my observations in a country where she is more thoroughly understood than in California at the present time. So the first point I am going to mention is that I found the people there appreciated the value and wonderful achievements of the Holstein-Friesian cow more than we do here in California. But I hope that that will not always be the case, as we have such perfect climate and conditions to develop that wonderful breed of cattle.

From my observations the great mistake made by the majority of breeders going into the business of purebred Holsteins is the economy practiced in producing a sire, a practice which the Eastern breeder has found to be a mistake. He purchases the best of sires and consistently breeds for high milk production. A case which was well illustrated by one of the consignors to a sale I attended in Watertown, Wis., where an entire herd was dispersed, consisting of thirty-nine head, which brought \$25,325, or an average of about \$650 per head.

The stock offered, however, was a fine quality, which is in great demand, while the animals bred along inferior lines brought comparatively low prices.

Competition for the good ones was keen between the proprietors of the Iowana Farms of Iowa, who purchased a cow with her dam and grand-dam, paying \$7200 for the three, and J. M. Hackney of Minnesota, each obtaining a number of splendid individuals.

However, I managed to bring four of the good ones from that sale back to California, as follows:

Piebe Laura Inka De Kol, a magnificent, fine-producing, high-testing cow, backed by a strong combination of breeding and A. R. O. 7-day records of 23.10 pounds of butter from 436 pounds of milk with an average test of 4.24 per cent.

Rossana Pietertje 2d, with an A. R. O. 7-day record of 21.60 pounds butter from 468.70 pounds milk and a 14-day record of 42.54 pounds butter from 902 pounds milk.

De Kol Colanthus Korndyke, another splendid cow, whose dam's 7-day record of 15.24 pounds butter from 319.20 pounds milk at 12 years 11 months 6 days shows her ability to keep the good work up.

Minita Glen Korndyke, who is one of the best bred cows of the breed, her sire being a son of Hengerveld De Kol and by a daughter of Pontiac Korndyke, and her dam a double grand-daughter of Pontiac Butter Boy. These cows are bred to some of the best sires of the breed, and are due to freshen soon.

I attended another sale at Lake Mills, Wis., where I found another offering of choice cattle brought about by the dispersion of several splendid herds, which alone made it possible to secure animals of such high merit in the sale ring. I purchased thirteen head, consisting of cows and heifers, mostly all bred, among which are the following:

Agnes Torchlight, with a 7-day record of 19.39 pounds butter from 431.70 pounds milk. She has a 24½-pound 3-year-old daughter.

Johanna Segis Dourida, a 2-year-old heifer whose sire is a son of the great show bull, King Segis Pontiac. Her dam's record at 2 years is 16.67 pounds butter from 407.10 pounds milk. There is not a cow in her pedigree that is not an A. R. O. animal.

Maud Pontiac, a young cow of extraordinary good breeding, being by a son of Hengerveld De Kol and Pontiac Heres, and from a daughter of Dutchess Ormsby Piebe Burke and Jesse Fobes 2d's Maud 2d.

Maud Pontiac was sired by Ollie Johanna Sir Payne, who is a son of Ollie Watson Prima Donna, who was sold at Watertown, Wis., for \$3000.

Molly Beets Segis, a heifer whose sire is Sir Gelse Walker Segis, who is by the great King Segis, from a 29-pound daughter of Lebanon Pietertje Prince and the grand old foundation cow Prilly, 25.20 pounds (record). Her dam is by Paul Beets De Kol, from a 22.92-pound grand-daughter of De Kol 2d's Butter Boy 3d.

Maggie Arte's Hengerveld, a daughter of the noted show bull, Woodcrest Hengerveld De Kol. Her dam is a daughter of Helena De Kol Arte's, and from the show cow, Nancy Spofford.

Queen Segis Hengerveld of Norwood, whose sire is Riverside King Segis, and whose dam is Dutches Hengerveld of Norwood, a 3-year-old with a 7-day record of 24.52 pounds butter from 579.10 pounds of milk.

King Pontiac Netherland Segis, who I purchased from Stevens Brothers, New York, and whose breeding you have a description of. I consider him one of the best bred bulls ever shipped to the Pacific Coast.

I think a great deal of your paper, and get lots of good advice out of it. I look forward with great anxiety from one number to another.

I was very glad to get back to California.

With best wishes for The Live Stock and Dairy Journal and the Holstein-Friesian cow. FRANK HATCH, Stanislaus County, Cal.

NOTABLE HOLSTEINS FOR KERN COUNTY.

Mr. Otis Lockhart has purchased for his Lockhaven ranch, Gosford, Kern County, two carloads of extremely choice purebred Holstein cattle from the great Woodlawn Farm at Sterling, Ill.

Among the cows is the great cow, Kalsora Inka, with an official record for 7 days of butter 22.02, milk 444.30; Bawn Buckeye 4th, with an official record of 18.01 butter, milk 486.80 pounds; Valley Farm Albina, 16.04 pounds butter, 370.90 pounds milk; Posey Lady De Kol, butter 20 pounds, milk 472 pounds; Udena, 17.07 pounds butter, 373.80 pounds milk; Woodlawn Cornucopia Josephine, official record for 7 days at 2 years of age, butter 12.30, milk 315.80 pounds; Woodlawn Goshen Wayne Cornucopia, record at 2 years of age, butter 11.07 pounds, milk 260 pounds.

The last two heifers are daughters of the great Woodlawn Farm bull, Sir Netherland Cornucopia, one of the greatest young bulls of the Holstein breed, having fifteen A. R. O. daughters, all as 2-year-olds, whose oldest son was, as a 2-year-old, grand champion of the Illinois State Fair in 1911, and this year as a 3-year-old, grand champion of the great dairy show at Waterloo, Iowa. Sir Netherland Cornucopia's own brother was the grand champion at all the important state fairs in the Mississippi Valley, including the Chicago Dairy Show of 1911; his own brother in blood has been twice grand champion at the New York state fair, and never was defeated at the great Eastern shows. Many of the cows in this consignment are bred to this great bull.

The heifers are bred to Prince Hengerveld Segis, whose two nearest dams have averaged records for 7 days of butter 31.20 pounds, milk 614.55 pounds, average fat 4.06. His nine nearest dams have records that average butter 27.23, milk 562 pounds, average fat 3.88. His seventeen nearest dams have records which average butter 25.27 pounds, milk 500 pounds.

Taking them all in all, this is one of the best lots of Holstein cattle that has ever come to California, and Mr. Lockhart is to be congratulated on his purchase.



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Ayrshires

Best blood in the West. Bulls, cows, heifers and calves. Our service bulls were sired by Grand Champions. Write for pedigree and prices.

BROWN & BRANDON,

Petaluma,

California

I HAVE A FEW BULL CALVES, Sired BY MY PREMIER HERD BULL.

DISTINCTION'S FINANCIER

His dam, a daughter of Financial King, sold for \$2300 in Walker's 1907 sale. He is 75 per cent the same blood as Sans Aloï.

I also have two sons of Golden Fern of Rockland, one son of Sans Aloï, one by Rainbow's Golden Lad, two by Jolly Brookhill Fern.

All go at farmers' prices for quick sale. Delivered f. o. b. San Francisco. Satisfaction guaranteed or money back. Have also a few cows for sale. Pictures, pedigrees and prices on application.

IDYL FERN DAIRY

P. R. BURRIS, Prop.

FORTUNA, CAL.

WE LEAD IN JERSEYS

Ten purebred and registered Jersey Heifers, ten purebred and registered Jersey Bulls, all strong, robust fellows, for sale. They are sons and daughters of our best milk producers, and sired by our famous herd bull. Largest herd of registered Jersey cattle in California. Write for prices and pedigrees. Also have purebred Jersey cows for sale.

Rancho Dos Rios, R. E. WATSON, Manager, R. F. D. 2, Modesto, Cal.



Senior Yearling Heifer Maud T. of Edgewater

ALTA VISTA HERD OF IMPORTED

GUERNSEYS

Owned by Charles G. Lathrop, Stanford University, California. Offers for Sale Excellent Individuals of Both Sexes

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OFFICE, 1501-3-5 SOUTH MAIN STREET, LOS ANGELES, CAL.

DUTCH BELTED CATTLE

At the Oregon State Fair, 1912, my herd won all first prizes but two and all Champion and Grand Champion prizes. At the California State Fair, 1912, my herd won all first prizes but two, both gold medals and all Championships but one. Young stock of the finest quality for sale. Write for circular.

Frank Reed Sanders,

SALT RIVER VALLEY,

MESA, ARIZONA.



FLORIBEL HERD

of Registered

Holstein-Friesians

Herd Headed by

Prince Beauty Pietertje Segis (84485). Born January 12, 1911. The records of his dam and the two nearest dams of his sire average 31.63 pounds. He is a son of Beauty Pietertje Prince, who was from a 32.5 pound cow, and by the best son of Beauty Pietertje (30.51 pounds). His dam the best daughter of King Segis. A few Young Bulls on hand. Will take orders for future delivery.

Floribel Land and Cattle Company

SAN FRANCISCO OFFICE, 815 Nevada Bank Bldg.

HARDWICK, CAL.

Raising Calves Without Skim Milk

On many farms, especially those near the larger milk markets, the whole milk is sold from the farm. On such farms the problem of feeding calves is a serious one. Here the calf must be raised on the minimum amount of milk, and this is usually whole milk. Some farmers solve the problem by raising the calves by letting two of them nurse one cow. Often there are cows in the herd that are hard to milk, and such cows are turned over to the calves. In such cases only the very best heifer calves are raised. Where there is ready market for the whole milk, it is a losing proposition to feed whole milk to a calf that will finally sell on the market for veal.

Another solution of this problem is to feed the minimum amount of milk, getting the calf to eat grain, or gruels made of grain, as early as possible. Some feed the milk for two or three months, and at the end of this time the calf is entirely fed on dry feed. This is probably the best method to follow.

Hay tea has been fed with fairly good results. In a trial at the Kansas Agricultural College calves fed on tea made from mixed hay (orchard grass, bluegrass and red clover) made less than a pound gain in live weight per day. Some feeders have used tea made from alfalfa hay with good results, but as a general rule the laxative properties of the alfalfa make it

almost impossible to keep the calves from scouring. One of the principal objections to any kind of tea is that it is troublesome to make and keep in good condition for feeding. It should be made fresh at least every other day.

Stabling the Calves.

The calves should by all means be kept in clean, well-lighted and ventilated stables. Where plenty of barn or shed room is at hand, the best method of handling the calves is to keep each one in a separate pen. A pen three feet wide, five feet long and three feet high is large enough to accommodate the calf until it is 4 to 6 months old. There are many advantages in keeping the calves in this manner. The calves will not suck each other's ears when they get through drinking their milk, and thereby cause the ears to freeze in cold weather, and they can be given more individual attention. They can be fed as individuals, and a case of scours among calves may be located more readily in this manner, and a remedy may be applied at once. Where there is less room to be had, the stanchions will usually give the best results. A stanchion made of wood, by using the following dimensions, will be entirely satisfactory: The stanchion should be made from 3 to 3½ feet high, and 18 to 24 inches from center to center, and neck space should be 4 to 5 inches wide. The stanchion is built in the same manner as the old style rigid stanchion. The feed manger may be 12 to 14 inches wide, or wide enough to accommodate the milk pail. The calf should be fastened while he drinks the milk, and the grain fed immediately afterward. By the time the calves have eaten the grain they will lose their desire to suck each other's ears. A part of the manger may be used for hay, but the calves should be loosened from the stanchions after they have eaten their grain. The calf pens and stanchions should be built in the south side of the barn where plenty of sunshine and light can be had. There is no disinfectant that will take the place of sunshine. During the summer the calf should have access to a pasture lot where there is plenty of shade.

Calf Scours.

The most common disease of the young calf is indigestion, or scours. Naturally the digestive system of the young calf is weak and is very easy to upset. The old adage, "an ounce of prevention is worth a pound of cure," is very applicable here. There are two kinds of scours that affect the young calf—white scours, sometimes called calf cholera, and common scours, caused from indigestion. The white scours is a contagious form, and if the calf becomes affected at all it is within several days after birth. The germs gain entrance to the body through the umbilical cord

soon after birth. The remedy for this disease is a preventive one, and the best way to insure against it is to keep the stalls and pens clean. Stalls used for calving purposes should be cleaned and disinfected after each calf is born. Additional precaution should be taken by tying a string around the navel cord of the young calf immediately after it is born, and applying some good disinfectant to the exposed parts.

The common scours, or indigestion, may usually be traced to faulty methods in feeding the young calf. The principal causes are as follows:

- 1—Overfeeding.
- 2—Feeding cold milk.
- 3—Feeding sour milk.
- 4—Irrregular feeding.
- 5—Feeding alfalfa or other highly nitrogenous hay to the young calf.
- 6—Using dirty pails.
- 7—Dirty stables.

The first sign of indigestion or scours among calves is usually the characteristic foul-smelling dung. When a calf shows the first signs of scours the milk should be reduced one-half or more, and then gradually increased again as the calf improves. This method of treatment is usually soluble dried blood and stir in well with the milk. Dried blood not only acts as a tonic, but it has a food value, and it is often fed along with milk at each feed on account of its feeding value as well as preventive treatment for the scours.

Another remedy which has been tried with success is the formalin treatment. This method consists of adding fifteen ounces of distilled water to one-half ounce of formalin. One teaspoonful of this mixture is added to each pound or pint of milk fed. This treatment should be given at the time the feed is reduced, and continue at each feed until the calf shows signs of improvement. These simple remedies, used with judgment and common sense, will usually cure any case of scours, but judgment should be used before the calf becomes affected.—Prof. O. E. Reed, Before Kansas Board of Agriculture.

CHOICE HOLSTEIN HEIFERS FROM EAST FOR YOLO COUNTY FARM.

The Live Stock and Dairy Journal—We recently returned from New York, where we purchased from Stevens Brothers' Company what we believe to be as fine a bunch of purebred Holstein-Friesian heifers as were ever shipped into the State. They possess both size and individuality, and are of the choicest and most popular breeding. Five of them are daughters of Changeling Butter Boy, a son of Pontiac Butter Boy, and that grand old matron Changeling (29.33 pounds of butter in 7 days), the first cow to give 100 pounds of milk in a day and produce a daughter with a large milk record. Both Changeling Butter Boy and Pontiac Butter Boy have distinguished themselves as sires, the former being the sire of 42 A. R. O. daughters and a full brother of Ready Change (31.16 pounds of butter in 7 days), and the latter being the sire of fifty-six A. R. O. daughters, two of which have each produced over 30 pounds of butter in 7 days. All five of these heifers are in calf, having been bred to that grandly bred young bull King Pontiac Artis, a son of King of the Pontiacs and Pontiac Artis. King of the Pontiacs is too well known among Holstein breeders to require any introduction. Suffice it to say that he is the greatest son of Pontiac Korndyke, the greatest bull living today. Pontiac Artis is one of the best daughters of the great Hengerveld De Kcl, and has won \$296 in prizes from the Holstein-Friesian Association. The dams of these five heifers were all sired by Tidy Abbecker Prince, a son of Sir Cornelia Posch and Tidy Abbe-



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When she freshens. Insure her life by ordering today the

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Makes it perfect by preventing blood poisoning.

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Most complete and most modern outfit in the world for administering sterilized air.

No man who owns even one good cow can afford to be without it a single day. Mailed promptly for \$3.

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3--BULLS--3

Registered Holsteins of A. R. O. Dams. Growthy, well marked and bull type. Bargain prices. No heifers for sale at present.

LINWOOD FARM,

Santa Cruz, Cal.

We have for sale cheap, an 8-h. p. gas

engine in good shape. Price \$150.



Purebred Registered

HOLSTEIN CATTLE

The Greatest Dairy Breed

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Holstein-Friesian Asso., Box 165, Brattleboro, Vt

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A Few Choice Registered Bulls and

25 Choice Registered Heifers.

Prices on Application.

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Attention Dairymen!

I am breeding the finest stock in the

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A Few Young Bulls Out of Large Producers for Sale.

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KEARNEY PARK,

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Registered Holstein Bull Calves

From \$60 up. Among them two great-grandsons of Colantha 4th's Johanna and Aaggle Cornucopia Pauline, who averaged 35 lbs. butter in seven days.

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HOLSTEINS

Nothing to sell now, but we are booking orders for calves for future delivery.

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BULL CALVES FOR SALE

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Make \$2000.00 more per Year

Hundreds of farmers right now are making from \$1000.00 to \$2000.00 a year extra money, besides keeping up their farm work, making wells with the

Improved Powers Boring and Drilling Machine

Bores 100 ft. in 10 hours. One man can run it; a team operates it and easily moves it over any road; Bore slate, coal, soapstone—everything except hard rock, and it drills that. No tower or staking—rotates its own drill.

20 years actual service all over the world have proven this the fastest and most convenient well machine made. Easy terms. Write for catalog.

LISLE M'F'G. CO., Box 426 Clarinda, Iowa.



kerk, that gained great renown as the "Champion of Canada," she having produced 27.29 pounds of butter in 7 days. Three of the heifers mentioned were sired by Albina Butter Boy, a son of De Kol's 2d's Butter Boy 3d and Jannek Albina De Kol 3d, one of the best daughters of Korndyke Queen De Kol's Prince, with a senior 4-year-old record of 29.71 pounds of butter in 7 days. Two of the heifers have for dams daughters of Sir Veeman Hengerveld, a well-known sire with thirty-eight A. R. O. daughters. Of the remaining heifers, one is sired by King Pontiac Artis, already referred to, and another is sired by a son of Changeling Butter Boy, already mentioned, and both are out of daughters of Sir Veeman Hengerveld. Most of the heifers are out of dams with A. R. O. records from 15.43 pounds to 22.58 pounds of butter in 7 days, and all of them will freshen next spring, at which time they will be given A. R. O. records, and later bred to our junior herd bull, Maplecrest Korn-

dyke Pontiac, a son of Friend Hengerveld De Kol Butter Boy, the sire of the champion butter cow of the world, Banostline Belle De Kol.
CLAUSEN & PETERSON,
Yolo County, Cal.

Professor Leroy Anderson writes the Journal that the registration in students at the State Farm this year is greater than ever before. In the Farm school there are 150 students against 99 last year. In the short courses, recently closed, there were 187 in attendance, against 163 in 1911 and 123 in 1910. The registrations in the seven courses was 295, against 214 in 1911 and 156 in 1910.

A little off color does not matter among utility chickens, for they may be thoroughbreds just the same, but they could not be standard bred unless they came up to the requirements of the "Standard of Perfection," as required for show purposes.

UNIVERSITY OF CALIFORNIA EDUCATIONAL BUTTER SCORING CONTEST.

Report of Sixth Entry, Scored November 14th, at University Farm, Davis, and Announcement of Awards for Year 1912.

The butter made at the University Farm creamery received a score of 94 points, the highest placed on any of the cubes sent to the sixth and last scoring of the current year. There were but sixteen entries received, the smallest number sent to any scoring during 1912, probably from the fact that this scoring represented the last of the year, and that it came at a time when conditions in a good many places are far from being the best. The quality of a number of the cubes emphasized plainly the latter, which serves to remind butter-makers and to show dairymen that, although the hot weather with its unfavorable effect on dairy products is now past, there is always the positive demand for careful attention to milk and cream. A common criticism was "old, stale flavor," indicating that cream is being held too long before delivery. The existence of cooler weather should in no way be considered an excuse for holding cream longer on the dairy. Winter or summer, our best butter will be made from cream which is placed under the butter-maker's care a short time after being produced, and which is produced under good conditions.

The entries of butter were scored by W. B. Thurston, Federal Dairyman, E. H. Wagemann and L. M. Davis of the Dairy Department, and the highest scores were, as follows:

Butter-maker.	Creamery.	Location.	Score.
L. B. Gurney	University Farm Creamery	Davis	94
Hans L. Beck	Danish Creamery	Fresno	93½
William Oelkers	Calexico Creamery Association	Calexico	93½
V. Baciarini	Suisun Creamery	Suisun	93
John Clausen	Riverdale Co-Operative Creamery	Riverdale	93
H. Ostergard	Siskiyou Creamery	Greenview	92½
Arnold Madsen	Salinas Creamery	Salinas	92½
P. Petersen	Sunset Creamery	Loleta	92
N. Pedersen	Visalia Co-Operative Creamery	Visalia	92
J. L. McDowell	Dairymen's Co-Operative Creamery	Tulare	91½
P. M. Becker	Grizzly Bluff Creamery	Grizzly Bluff	91
J. S. Phillips	Delta Creamery	Imperial	91
F. C. Hyde	Tulare Co-Operative Creamery	Tulare	91

Summary of 1912 Contest—Prizes Offered.

- 1—"There will be four prize cups for those contestants having the four highest averages, respectfully, of the six separate scorings during the year.
- 2—"A certificate of merit will be awarded to each contestant whose six scorings average 92 or above.
- 3—"A certificate of merit will be awarded to each contestant sending but five entries whose average score is 93 or above.
- 4—"In order to be eligible as a cup winner, the average score of a contestant must be sufficient to gain a certificate of merit."

Winners of Prize Cups.

Prize.	Butter-maker.	Creamery.	Location.	Av. Score.
First	V. Baciarini	Suisun Creamery	Suisun	93.54
Second	H. Ostergard	Siskiyou Creamery	Greenview	93.41
Third	Hans L. Beck	Danish Creamery	Fresno	93.12
Fourth	Peter Petersen	Sunset Creamery	Loleta	92.75

Winners of Certificates of Merit.

Butter-maker.	Creamery.	Location.	Av. Score.
V. Baciarini	Suisun Creamery	Suisun	93.54
H. Ostergard	Siskiyou Creamery	Greenview	93.41
Hans L. Beck	Danish Creamery	Fresno	93.12
Peter Petersen	Sunset Creamery	Loleta	92.75
J. L. McDowell	Dairymen's Co-Operative Creamery	Tulare	92.5
Arnold Madsen	Salinas Creamery	Salinas	92.
P. M. Becker	Grizzly Bluff Creamery	Grizzly Bluff	92.

If there is a desire on the part of butter-makers, the contest will be continued in 1913, beginning early in the year. In the meantime those interested should make any suggestions they may have in mind, in preparation for the same. The success of a lot of hard work in connection with a scoring contest is determined by the support given the enterprise. We wish to thank those who have in any way supported the 1912 contest.

Yours respectfully,

LEON M. DAVIS.

University Farm, Davis, Cal., November 15, 1912.

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THE SAME MAKE YOU PAY DOUBLE PRICE FOR AT HOME.

Stafford's Best Paint at Wholesale to You.
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Ten head Registered Holstein Cows and Heifers. Also six Purebred Holstein Bulls from 6 to 18 months old. All exceptionally well bred stock. I also offer for sale my entire herd of Heifers—125 head, mostly high-grade Holsteins, 16 head Guernseys, aged from 6 months to 2½ years, all out of high producing dams and sired by purebred bulls.

This is a chance to secure good stock for a foundation herd. Will sell as a whole or in earload lots. Apply to

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We carry a complete stock of the Best Lines of Supplies and Equipment for the Dairyman, Creameryman and Butcher. Gasoline Engines, Motors and Complete Irrigating Systems. Our prices are right. Special attention given to Mail Orders.

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ATTENTION DAIRYMEN!

A HERD OF MILKING SHORTHORNS FOR SALE.

Wishing to devote my entire time to the raising of Registered Berkshire Swine, I am offering my entire herd of Registered Shorthorn cattle, consisting of bred cows and heifers and suckling calves, all red, at a price that will appeal to anyone who wishes to get a start in registered stock, or to improve his herd. For particulars write or call. I also have for sale a few Berkshire sows and boars ready for service.

H. L. MURPHY

Six Miles from Sacramento on Jackson Road

Perkins, Sacramento County, Cal



Riverside Saddle De Kol Burke.

Attention Breeders and Dairymen!

Are you in need of a herd sire? We are offering the choicest lot of

Holstein-Friesian Bulls

Ever offered in the State. Several Eastern bulls sired by Korndyke Queen De Kol's Prince, the sire of four daughters that average 30.22 pounds of butter in 7 days, and one with 1090 pounds of butter in one year. Also have a few bull calves by our herd sire, King Segis Pontiac Emperor, who is a grandson of Pontiac Clothilde De Kol 2d, and his dam a full sister of King of the Pontiacs. Will have some cows and heifers for sale later.

A. W. MORRIS & SONS

WOODLAND,

CALIFORNIA.



IDLE WILD FARM

BREEDER OF

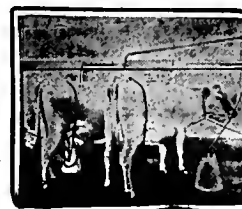
GUERNSEYS

WM. M. LELAND,

Turlock, California

Kitchener's Corona Boy, Grand Champion State Fair 1912

MANY DAIRIES on the PACIFIC COAST are now using the HINMAN MILKER. FORTY machines, equipping nine dairies, bought since the State Fair.



W. E. Moyle, Modesto, Cal., a beginner, milks his twenty cows with two machines in one hour and ten minutes.

The average man can handle three machines. TWO MACHINE outfit, with power, costs about TWO HUNDRED DOLLARS.

Get in touch with California and Oregon Agents

C. F. DANIELLS & SON, Modesto, Cal.,

SALE DATE CLAIMED.

Woodlawn Farm, Sterling, Ill., has claimed Tuesday and Wednesday, October 21 and 22, 1913, as the date for their second annual sale. Many of our Pacific Coast readers are already familiar with the high excellence of Woodlawn Holsteins, and their second annual sale will, no doubt, be attended by some buyers from this territory.

EVERY DAIRYMAN SHOULD READ THIS BULLETIN.

We have often deplored the lack of concrete facts to be had in connection with many of the branches of live stock husbandry in California, and chief among them has been the absence of dairy figures, such lack being due to the fact that comparatively few dairymen have kept accurate records for a length of time sufficient to make them authentic.

In Bulletin 233, issued by Agricultural Experiment Station, Berkeley, Cal., Professor Leroy Anderson gives the facts and figures covering three years' work of the Ferndale Cow Testing Association. This association is composed of the owners of eight dairy herds, and at the end of three years the figures themselves are the most eloquent testimonial as to the value of the association.

Incidentally Professor Anderson has some very conclusive arguments in favor of the purebred dairy sire in this bulletin.

We advise every dairyman in California to send to the Agricultural Experiment Station, Berkeley, Cal., for a copy of Bulletin No. 233.



KING PONTIAC RUBY BURKE.
Owned by A. B. Kendall, Modesto, Cal.
This Good Bull is a Son of King of the Pontiacs, and Out of Ruby De Kol Burke.

THE NATIONAL DAIRY SHOW.

The seventh National Dairy Show, held at Chicago the latter part of October, was the most successful one yet held, judging from all reports of the event in the various Eastern publications.

The show seemed better than all its predecessors for the purpose for which it was founded—the stimulation of interest in profitable dairying. The exhibits of stock and of machinery were more extensive than heretofore, and the accommodations were highly satisfactory, both from the standpoint of exhibitors and visitors. The financial outcome was encouraging to the promoters of the great annual event, and will serve to stimulate their future efforts.

In the three leading dairy breeds the entries were large, and excellent specimens were there from all portions of the country. Of particular interest to Pacific Coast breeders is the fact that many of the best awards in the Holstein classes went to the Hazelwood Farm of Washington. This farm took three of the four championships, and opened the eyes of Eastern breeders as to what may be done under Pacific Coast conditions.

The Dutch-Belted herd of U. G. Strader of Stanislaus County, Cal., carried off high honors, too, and made a most favorable impression with

judges and spectators. This was the only herd from California. It is easy to imagine the impression made upon Easterners when they thought of the pluck of the breeder who came from far-away California to compete against the whole United States in the show ring.



MINNIE WAYNE DE KOL'S SON (89203).
Heading Holstein-Friesian Herd of Minor & Thornton, Kearney Park, Cal.

JERSEY NOTES.

Gerald O. Hillier of Stanislaus County, who recently received twenty-eight head of purebred Jersey cattle from the East and added them to his herd, now has one of the largest herds of Jerseys in California. With the lot of splendid females Mr. Hillier brought out a bull of royal breeding. He is King Polo Bleakhouse, a full brother to John Polo. This fine individual is coming 3 years old.

C. D. Hayworth of Stanislaus County has a herd of twenty-five purebred cows and heifers on his forty-acre farm. His herd bull is Diploma's Bijou Boy (186292), whose sire was Dordma Darling's Diploma (718111), and whose dam was Ooran's Bijou II (182195). Mr. Hayworth has a 3-months' bull calf by Gertie's Son, dam Adelaide Violetta, who combines the blood of the great imported bulls Golden Marquis and Stoke Pogis of Prospect. Mr. Hayworth is one of the pioneer breeders of Jerseys in Stanislaus County.

D. F. Conant of Stanislaus County, who purchased Victor's Lady Dolly at the George A. Smith sale for the top price of \$575, and followed it with the next highest price for Victor's Lady Kate, has his herd of purebred Jerseys in good shape. His young sire, by Gertie's Lad, is developing into a likely bull, and the owner expects great things of him. Mr. Conant's herd bull is Foxy Underwood, who was bought from Guy H. Miller. Among the good cows to be observed at the Conant ranch is Mamie Owl, whose dam had a record as a butter producer. Mr. Conant is coming to the front very rapidly as a Jersey breeder. He also has some good grades, one of his grade Jerseys having recently given 36 pounds of milk, testing 4%, with second calf. Mr. Conant also breeds Poland China hogs.

W. M. Snedigar of Stanislaus County recently purchased from George E. Covell a 3-year-old Jersey cow, Melia's A. Grace (236591). This cow gave 7000 pounds of milk in 1911 with first calf. She traces back on sire's side to Stoke Pogis III and on dam's side has Rector blood. Mr. Snedigar also has Victor's Kothe (238096), a 3-year-old, bred in Connecticut. There is a 4-months-old bull on this place whose grandsire is Golden Marquis and dam Melia's A. Grace. One of the best cows owned by Mr. Snedigar is Copa De Ora (129389), who traces back to Spanish Beauty. Mr. Snedigar also breeds horses extensively.

VETERINARY

We cordially invite the readers of The Live Stock and Dairy Journal to consult this department. Questions will be answered free by mail, and a stamp should be enclosed for return postage. Give age, color and sex of animals, with full details of symptoms and conditions and previous treatment, if any.

The Live Stock and Dairy Journal—Will you please give me the address of the Government experiment station on cows and their diseases, such as the red disease, anthrax and the vaccines used for them. I want to know if there is anything to be done for a cow that continues to bloat every day from alfalfa, while others do not.—C. F., Topaz, Cal.

For bulletins and information regarding red disease, anthrax and the vaccines used for them we suggest that you write Veterinary Department, State Agricultural Experiment Station, Berkeley, Cal.

For your bloated cow procure the following from your druggist:

Magnesia sulphate.....	32 ounces
Ammonia carb.....	2 ounces
Po. Nucis Vom.....	2 ounces
Po. Gentian.....	2 ounces

Mix and give one-quarter in a pint of water every hour until entire amount is given.

The Live Stock and Dairy Journal—The heifer belonging to G. C. H., which has a lump on her jaw, undoubtedly has lumpy jaw, as you state in the October Journal. This frequently occurs on all large cattle ranges, and the only remedy is to pull the jaw tooth which you will undoubtedly find ulcerated, and which, if allowed to remain, will destroy the jaw bone.—J. R. A., Princeton, Cal.

Lumpy jaw is due to a fungus which attacks the jaw and tongue as well (woody tongue). The fungus is well known, easily separated and studied, and can be transplanted from one animal to another, producing its conditions—lumpy jaw and woody tongue.

Brown & Brandon, the well-known Ayrshire breeders of Petaluma, recently obtained from Canada a promising Ayrshire bull calf, intended as a future herd header. He is Springbrook Comrade (15000), by Anchenbrain Good Gift (14999), and out of Springbrook Lila (33328). He is a very fine specimen, and gives every promise of making a grand bull. He is mostly white, with a few brown spots on neck and sides. The names of his ancestors are conspicuous in the advanced registry of the breed.

The ulcerated tooth is a result of the condition and not the cause of it. Pulling the tooth will not cure lumpy jaw, but pulling an ulcerated tooth which has caused a swelling of the jaw will suffice.

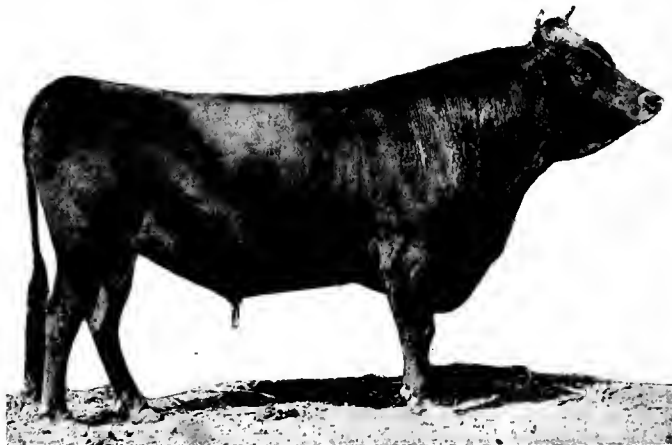
In lumpy jaw we have the production of new bone, but in the case of an ulcerated tooth the bone bulges from the pressure of pus in the cavity containing the tooth.

The Live Stock and Dairy Journal—What is the youngest age at which a sow can be spayed? Is there any time when it can not be done? At what age is it best to spay them? The reason I ask is that I have a few to spay (I spay in the belly), and cut two of them open but could not find the ovaries in either one of them. I took the womb out and looked for them thoroughly, but could not see them. I hardly ever have to do this, for, as a rule, I can feel them with my fingers. The boar pigs of the same litter as the above were hard to alter, as their testicles were draw far up. Do you think the sows are not developed enough to spay as yet? They are nearly 6 months old. I have spayed a good many sows, but this bunch has got me. Thanking you in advance for your reply.—J. S., Davis, Cal.

They can be spayed at any age, but 2 to 6 months of age is preferable, as the ovaries are then sufficiently developed to feel, and there is plenty of time for them to fatten. We would advise an incision in the flank instead of median line, and remember that the womb is little larger than a lead pencil in young sows.

Malcolm H. Gardner, Superintendent of advanced registry of the Holstein-Friesian Association of America, says that a bull without a record is better than a record without a bull. Bulls should be selected with special reference to the common flaws of a herd, the idea being to secure a bull strong in the points wherein the cows might be weak.

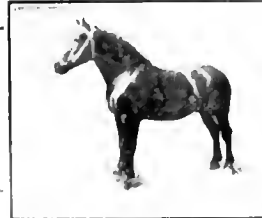
Jay Dutton, Superintendent of the Mercier Ranch, Stanislaus County, went East the latter part of October to buy some purebred Holsteins. We hope to give an account of his purchases in our next issue.



RIOTER OF SAN JOSE (62098).
A Double Grandson of King of St. Lambert. Sire King's Rioter Lad, dam Letty's Rioter of St. Lambert (92842). With Seven-Day Test of 24 Pounds 1 Ounce of Butter. Owned by Jersey Queen Stock Farm, San Jose, Cal.



THE HORSE



The Value of Soundness in Horses

Experience has taught the observing horse breeder that soundness often spells success, and unsoundness spells failure in horse breeding operations. Many a man has had his expectations elevated to the clouds by the promising development of a yearling or 2-year-old colt, only to have them dashed to pieces by the sudden appearance of a spavin, curb or some equally serious unsoundness.

The writer, as a boy, was presented with a weanling colt, a strong, vigorous chap of good breeding. Visions of the conquests he would make in the show ring became almost realities, so constantly were they reviewed. But they were never realized. As a 2-year-old he began an eventful career of misfortunes by developing a curb. About two months after it had almost disappeared, he developed two. As a 3-year-old he produced a typical bone spavin. As a 5-year-old he suffered badly from contracted tendons in the forelegs, which indirectly caused him to become so "hock-kneed" that he was practically worthless. A youthful breeder's hopes lacked a considerable amount of being realized.

Early in our story of the principles of breeding we are told that "Like produces like," but later we learn that veterinarians are agreed that unsoundnesses as such are not generally transmitted. If we stop here we are confused, but if we inquire more fully into the verdict of the veterinarian we find the conclusion is that the tendency to unsoundness is transmitted, and with the same regularity as is the beauty of form or lack of it, or any of the common colors.

It must then be very evident that we should not expect to produce sound, vigorous horses if we use brood mares and stallions that would not pass a critical test.

In order to stand the severe ordeal of heavy draft work, either on the farm, road or city pavements, or the extreme endurance demanded of a roadster, racer or saddle horse, there must be no weak spots in the composition. There must be no tendency to curbs, spavins, ringbones or sidebones, no brittle feet, contracted at the heel or narrow at the hoof head; no soft, porous bone or ill-defined joints.

The value of a race horse is often measured by his speed, yet how often has the owner been disappointed just at the critical stage in a horse's career because of the sudden appearance of an unsoundness. Many a draft gelding has been sold at a moderate price because he went wrong.

Good sound stallions are within the reach of almost every owner of good mares, and the service fee is generally not more than \$10 higher than that of an unsound or grade horse. If the development of unsoundness is to be guarded against in the offspring, this \$10 is indeed a very small premium to pay for the guarantee of superior excellence certain to occur from the better horse.

If the standards of the horses bred in California are raised to what they should be, only mares and stallions with the most desirable underpinning should be used as breeding stock.

The indications of a good leg are hardness, smoothness and cleanness of bone, free from meatiness, large, clean, well defined joints and tendons standing out clear and strong, giving the leg a flat appearance when viewed from the side; not excessive length from knees and hocks to pastern joints; pasterns of moderate length and slope, somewhat straighter behind than in front, strong and clean. The leg should stand squarely and firmly under the body and the toes turn neither in nor out. The feet should be of medium size to large. They should be neither flat or mule-footed, but intermediate between the two; the

ally depends on his weight and strength, but these may be entirely countermanded and made useless by the development of one or more unsoundnesses.

The average value of horses for the entire United States is \$113 per head, while the average value for this State is only \$77. The elimination of many unsoundnesses by the use of good stallions and mares would aid very materially in bringing this average more nearly to that of the entire country, where it certainly belongs.

J. L. THOMPSON.

1915 LIVE STOCK APPROPRIATIONS IN THIRTY STATES.

The Legislatures in thirty states will convene in January, 1915. In every one of these states a bill will be introduced providing for representation at the Panama-Pacific International Exposition in 1915. The event which the Exposition at San Francisco will

the reason that the money goes back into the pocket of the farmers and adds to the material resources of the commonwealth. Stockmen should busy themselves in writing to the Agricultural Committee of their state Legislature, and to the author of the bill providing for representation at the Panama-Pacific International Exposition, insisting that a special appropriation should be made for live stock premiums at San Francisco.

One of the big lessons that will be taught by the Live Stock Department at San Francisco in 1915 is that there is a great demand for horses suitable for cavalry uses. An effort is now being made to enlist the co-operation of the United States army. The Morgan horse interests and breeders of the United States are much alive to the opportunity that will be offered for showing the usefulness of that breed for producing horses suitable for



Shire Mares and Colts. Owned by Jas. W. McCord, Hanford, Cal. Mares All Imported.

heel about one-half the length of the toe; they should be large and open at the hoof head, the wall of good texture; the sole concave and the frog large and elastic.

Too often we see stallions standing for public service that are too light in the bone, which is often round and meaty and tied in below the knees. "Bowed legs," "bucked knees," "calf knees," "curby hocks," "cow hocks" and "sickle hocks" are far too common. Narrow, contracted feet showing tendencies to roughness of sidebones just above them can be found without very diligent searching.

The hocks are often narrow, rough, weak and often are capped, show a curb at the rear or a bone or bog-spavin on the inside and a thoropin in the front or in the web.

More attention to these details on the part of our breeders would produce a decided and valuable improvement in our horses. Remember that undesirable characteristics are transmitted just as forcibly as the desirable ones. Mares or stallions showing defects due to accidents and not to constitutional weaknesses may be safely used for breeding purposes, but the others should be barred.

The desirability of a draft horse usu-

ally depends on his weight and strength, but these may be entirely countermanded and made useless by the development of one or more unsoundnesses. The average value of horses for the entire United States is \$113 per head, while the average value for this State is only \$77. The elimination of many unsoundnesses by the use of good stallions and mares would aid very materially in bringing this average more nearly to that of the entire country, where it certainly belongs. The Legislatures in thirty states will convene in January, 1915. In every one of these states a bill will be introduced providing for representation at the Panama-Pacific International Exposition in 1915. The event which the Exposition at San Francisco will

celebrate is of too much moment for any state to overlook. The vast audience that will congregate in San Francisco in 1915 should have an opportunity of seeing the resources of every state in the Union. No showing of the resources of any state is complete without a representative display of live stock. Live Stock and poultry in the United States represents a valuation of six billions of dollars. The sale of live stock, dairy products, poultry and poultry products, stands far ahead of any other source of income to the American farmer. It, therefore, behooves the individuals and organizations representing all branches of the live stock industry to insist that when an appropriation is made for representation at the Panama-Pacific International Exposition, a certain sum shall be set aside for making such appropriation. The Exposition Company has set aside \$175,000 for live stock premiums—competition open to all the world. Situated on one side of the United States there will naturally be some expense in getting shipments of live stock to San Francisco. It would be an attractive plan to give part of the State's appropriation for live stock premiums for

cavalry purposes. The question of army remounts is not only agitating army officials of the United States, but of all other countries as well, and the foreign governments will be keenly active in studying the cavalry horse problem as it will be demonstrated at the Panama-Pacific International Exposition at San Francisco in 1915.

The report of Portland Union Stock Yards for October shows an increase in cattle receipts, as compared with the same month last year, of 1047 head, a decrease of 878 for calves, an increase of 6703 for hogs, a decrease of 5110 for sheep. For the year, as compared with last year, cattle receipts show a decrease of 10,245; calves, 7553; hogs, an increase of 20,057; sheep an increase of 56,938. Receipts from California for October were 30 head of cattle and 1433 head of hogs.

Ruby & Bowers, the well-known horse dealers, report the recent purchase of a ranch at Davis, Cal. They will erect a barn large enough to accommodate fifty horses, and make Davis their permanent headquarters. A new lot of three carloads of stallions has just arrived at their headquarters.

Imported Shires

We offer for sale young mares and stallions from some of the best stock in England. Ages range from 1 to 4 years. These are all good individuals, and every one is absolutely sound. We also have saddle horses and driving stock for sale.

Correspondence and inspection of stock invited.

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PHONE 131.

A. W. WARD, Superintendent

JOHN TROUP, GOLETA, CAL.

IMPORTER OF CLYDESDALE, SHIRE AND PERCHERON HORSES AND REGISTERED CATTLE OF BEEF AND DAIRY BREEDS. All Stock Sold at Reasonable Prices. Every Animal Guaranteed as Represented. Orders Executed on Commission. Reference, Commercial Bank, Santa Barbara, Cal.



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I offer for sale ten head of Big, Heavy-Boned Young Jacks from 2 to 5 years old. Four of them prize winners. All ready for service and fully tested and guaranteed. I sell at home and employ no expensive agents. Come and see my Jacks whether you buy or not.

Jas. W. McCord

PHONE 471 J.

HANFORD, CAL.

Salvador Stock Farm

Napa, California

Headquarters For Shires



My winnings, given below, at the State Fair just closed:

First and second 4-year-old stallion.
First and second 3-year-old stallion.
First 4-year-old mare.
First 3-year-old mare.
First 1-year-old mare.
Grand champion stallion.
Grand champion mare.

These winnings should convince anyone of the quality of my stock.

Write for prices, which you will find very reasonable.

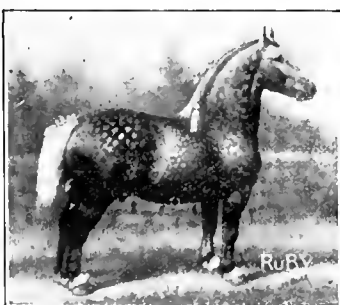
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The Largest Horse Importers on the Pacific Coast



Percheron, Belgian, English Shire, Clydesdale, Hackneys and Coach Stallions and Mares.

We sell more imported horses than all other firms on the coast because we are direct importers and give a four-year guarantee which is good right at home. We have on hand at all times the largest and best lot of heavy draft stallions and mares, both American bred and imported, to be found any place in the West. If you are in the market for a high-class stallion or mare, don't fail to give us a call, as we can sell you more genuine horse for the money than any other importer in the business.

Address: RUBY & BOWERS, DAVIS, CAL.

Ruby & Bowers Have Imported More Horses Than Any Other Firm in the United States

LIVE STOCK BREEDING.

(Continued from page 3.)

year and marketed, weighing three hundred pounds, before the Assessor comes back next year. Some such hogs may be found in almost any of the well known breeds. With careful selection and judicious mating it is surprising how rapidly this type can be revived. In addition to the evil results of "fadism," the exclusive use of a corn diet and the policy of breeding from immature sires and dams have been detrimental, both from the standpoint of size and prolificacy. It is safe to say that over 75 per cent of all the sires and dams used in the state of Iowa are under 1 year of age. It has been clearly proven by experimental work that pigs from young sows are inferior in every way to those from mature sows. The continued use of young sires and dams, especially when associated with corn feeding, will cause marked deterioration in any breed of swine.

In selecting breeding swine attention must be given to size, quality, strength of bone, evenness of fleshing and the use of more mature boars and sows. All pigs intended for breeding purposes should be selected from well developed, mature sows. If the sires are mature animals, so much the better. These pigs should be fed on rations calculated to produce bone and muscle—not fat alone. In this way we could materially improve our swine herds without changing breeds.

In conclusion, I wish to once more emphasize the importance of utility in all classes of stock. Beware of "fadism" in any of its various forms. Demand masculinity in the sires and femininity in the dams. Also remember that the best results can only be obtained where careful selection is combined with intelligent mating and the proper feeding and management of the animals.

LIVE STOCK DEPARTMENT WORKING SMOOTHLY

The live stock department of the Panama-Pacific International Exposition is now fully organized and in working condition.

"My part of the Exposition work is well under way," says Chief Lively. "The Directors of the Exposition have set aside \$175,000 for premiums in live stock, and all over the world men are getting ready to show horses, cattle, sheep, swine, poultry, pet stock, dogs and cats at San Francisco in 1915.

"Few people realize the importance of the live stock industry. Including poultry, it represents \$5,000,000,000 in the United States alone. Take any million people representing or interested in any division of the Exposition, and the live stock owner will have not only the price of the trip, but a bigger inclination to come to San Francisco to the Exposition than any other possible visitor.

"The display made by the people of the United States and the foreign exhibits will be the most interesting. China, Japan and Korea will have exhibits that will attract much attention. The United States will show American saddle and draft horses, the cavalry type and the American trotter.

"Besides the exhibit from this country, in all probability there will be a government display of Arabian horses. Wales and Australia will have sheep on exhibition.

"The dairy demonstration will open the world's eyes to the possibilities in milk production. Poultry will be a special feature.

"There will be nothing stereotyped in the live stock show at San Francisco in 1915. An effort will be made to put the animals where they can be seen, and not have them as difficult to sight and access as the usual exhibit.

"An amount of ready and enthusiastic co-operation, not heretofore ex-

perienced, is being given my department by the agricultural press and the Breed Record Associations. Even this early the American Berkshire Association has set aside \$2000 for special premiums at the San Francisco Exposition, an amount \$200 in excess of that given to the great St. Louis fair."

LIME FOR SOILS.

Unburnt but finely ground limestone is best for correcting soil acidity.

The use of lime on soils is beneficial in places where calcium is deficient. Some crops require more calcium than others. This is especially true of clovers, alfalfa and other leguminous crops.

Whether the soil requires calcium depends upon its condition, and this can be determined by one or two methods—either by a close examination of the plant growth or by the use of litmus paper. If you find horse sorrel present in large quantities it will indicate that your soil requires calcium, also, if clovers do not grow well it will indicate that calcium is lacking.

By the use of litmus papers, which may be purchased at most any drug store, you will be able to determine whether your soil is acid. Take a small quantity of moist soil and press it around the paper for ten or fifteen minutes. If the blue paper is turned to a pinkish or redish color, it will indicate that your soil is acid, and an application of lime will be beneficial.

There are several (at least ten) forms of commercial lime on the market. The best form to use is finely ground limestone. First: because it is cheapest, and, second: the effect on the humus is not so serious as with other forms of lime—especially caustic or quick lime. The action of finely ground limestone in its attack on the vegetable matter is less noticeable than with other forms of lime. The amounts to apply depend on how badly your soil requires calcium, and also upon the available supply of limestone. We have known of instances where as high as eight tons have been applied to the acre with good results, and as low as a ton or a ton and a half has been used very satisfactorily. The usual amount varies from three to six tons to the acre. This material should be applied to the surface after the seed bed is prepared, and harrowed in by the use of a peg-tooth or disk harrow. It may be scattered by the use of a manure spreader; in fact, this is the usual machine for applying finely ground limestone.

TESTING GAS ENGINE BATTERIES

Gas engine users, having battery ignition outfits, should test the batteries at least once a week by loosening the wire from the engine igniter, and tapping it on the post where the wire from the battery or coil connects to the engine frame. This tapping should show a fat, bright spark; if not, proceed as follows:

See that all connections are clean and tight. Examine switch, if one is used, and see that the blades are free from grease and dirt, and make a good connection.

Remember the wire must be clean and bright. The insulation must be off of same where it is attached to a post. There must be no loose joints.

Examine the spark and coil and see that the terminals or connections where the wire joins same do not touch each other. If the coil is wet with oil or water it will not work.

Wet spark coils can sometimes be repaired by putting them in an oven and baking at a heat not exceeding boiling water, until thoroughly dried out. Be careful not to have heat great enough to melt the compound in which coil is immersed, or it will split the wooden heads.

Remember, the zinc of one battery

cell must connect to the carbon of the next. The zinc terminal is always the post on the outside can or shell on a dry battery and the carbon terminal the one on the black rod sticking up in the middle. If batteries are connected up any other way they will not work properly.

To test the batteries to see if they are strong enough, take a very fine copper wire or a pin and hold it very firmly against the post on the zinc. Let the pin point just touch the black part of the carbon, but not the brass post. If a small puff of smoke is seen and a tiny spark, or the pin seems warm, it is an indication that the battery is all right. Don't hold the pin on the carbon except for a few seconds. If no sign of spark can be seen, batteries are probably ex-

hausted and a new set should be procured.

It is always better to have an ammeter or measuring instrument for testing batteries, and they should be tested every week. Batteries showing less than 6 to 8 amperes will not give good service.

Read your engine instructions carefully and don't try to use more batteries in series than the makers recommend.

A slow speed engine-timed magneto, built into the engine, eliminates all battery, switch and wiring troubles. It costs a little more than the batteries, but requires no attention nor renewal, and is as much a part of the engine as the crank shaft. All leading makes of engines are furnished with "built-in" magnetos with simple external means for timing, if the purchaser specifies same. The magnet is a device whereby the engine makes its own current as long as it runs.

DIARRHOEA IN ANIMALS.

Diarrhoea is caused by some disturbance in the bowels. In some animals it may be produced by some specific germ, as "white diarrhoea" in chickens or cholera in hogs. In young calves or colts the milk of the mother usually induces it and very often proves serious. In older horses fermented or soured feed, inactivity of the liver, worms, foul water, overheating or exposure to cold may cause the trouble. In cattle, bloating, excessive green feed or mouldy silage may be the causative. The watery discharge from the bowels may be accompanied by cramps and other colicky symptoms, and in young colts and calves death often ensues.

Treatment consists in treating the cause of the diarrhoea, for it is only a symptom. Each case should be given individual treatment, and no specific drugs can be mentioned for all cases. For calves, raw linseed oil is good with half teaspoonful of ginger.

In chickens thoroughly disinfect runs and coops with carbolic acid in white-wash.

Probably no other class of disease causes as much loss among young animals as do bowel diseases, and it is a good policy to consult a competent veterinarian at the outset, for the correct treatment at the beginning will often save the animal's life.

E. T. BAKER, Veterinarian,
Idaho Experiment Station.

The Purebred Record Associations have begun to take cognizance of the live stock show at San Francisco in 1915. The Berkshire Association has set aside \$2000 for that breed, and in the letter giving this information, the Secretary makes the following statement:

"It has been found by the members of this Association and breeders of Berkshire hogs that an exhibit of the breed that is in keeping with the other lines of endeavor brought together by a world's exposition does more to advertise and promote the breed than any agency that we have been able to discover and that such benefits are lasting."

In the report of the Kings County fair in the November *Journal* the yearling Holstein cow class was omitted. The winner in this class was Fran Creamelle Stratford Korndyke, with Floribel entry second and third. Also in the bull classes the junior champion was found in the entry of T. J. Gilkerson instead of the Floribel entry, as stated.

J. K. Fraser, Denair, Cal., the well-known breeder of Duroc Jerseys, reports the recent sale of one boar and two sows to Miss I. Garwood, Sacramento County, two sows to Albert A. Akim, Sacramento County, one boar to J. Caples, Sacramento County, one boar to A. H. Staff, Glenn County, one sow to J. R. Brewer, Glenn County.

ty, one boar and five gilts to J. W. Mowrer, one boar to Andrew Schoedel, one boar to Evar Tarnell, all of Stanislaus County, and one boar to Henry Webb, Madera County.

HOUSING SWINE.

In the class in "Swine Production" at the Washington State College the question of hog housing recently came up. These are the conclusions:

Hog houses need not be elaborate or expensive, but they must be good for the purpose. A good house—

First—Is dry and clean inside.

Second—Is well ventilated.

Third—Admits plenty of light.

Fourth—Is free from drafts.

Fifth—Is comfortably warm for the hogs.

Such a shelter will avoid trouble from colds, rheumatism and pneumonia. It will not be a breeding place for disease germs. If your hog shelters are not satisfactory, see how well and how cheaply you can make them fit these conditions.

In our damp winter, dryness is absolutely essential. Don't give too much bedding and change it frequently by cleaning everything out of the sleeping pens. Scatter air-slaked lime about at frequent intervals. Use a coal

tar dip or crude carbolic acid solution and spray the pens every few weeks.

Keep her off the hog. Do you like to go into your hog houses? Why not? Fix it so it suits you and see what the pigs say.

Buy the Best Horse Clipping Machine in the World at your Dealer's for Only \$8⁵⁰



With this wonderful Stewart Ball - Bearing Enclosed Gear Machine, you can clip horses, mules and cows easier and quicker than in any other way. This machine has all gears cut from solid steel bar. They are all enclosed, protected and run in oil. There is a six feet of new style high grade flexible shaft and the celebrated Stewart single tension nut clipping knife. Get one from your dealer or write for our new 1914-15 Catalog. Send a postal today. Chicago Flexible Shaft Co. Chicago.

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OUR GREAT IMPORTATION



Of Percheron, Belgian, Hackney and German Coach Stallions has arrived at our stable. The choicest lot of high-class stallions ever brought to America.

Large numbers of them First, Second and Third Prize Winners at the French and Belgian Shows this year. No other importer has ever made such a wonderful record for prize winners in the European shows.

At California State Fair, 1912, our Stallions won Eight Firsts, Three Seconds and Three Thirds, Four Championships and One Grand Championship.

If you are going to buy a Stallion come now while you can get a good selection and at very close prices.

Permanent Stable at State Fair Grounds, Sacramento, California.

J. F. CAMPBELL,

PHONE CAPITAL 31.

MANAGER.

JACKS and JENNETS



I HAVE ON HAND THE BEST LOT OF JACKS AND JENNETS EVER SEEN IN ONE LOT ON THE PACIFIC COAST.

THESE JACKS WILL BE SOLD UNDER MY USUAL GUARANTEE, WHICH IS, WITHOUT DOUBT, THE BEST GUARANTEE PRINTED OR GIVEN TODAY WITH ANY CLASS OF BREEDING STOCK IN THE UNITED STATES, AND MY GUARANTEES ARE ALL MADE GOOD TO THE LETTER. WRITE OR CALL AND SEE THE STOCK.

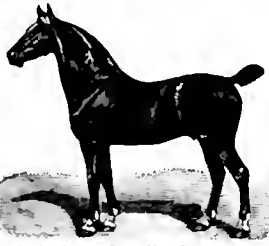
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Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. (If send for descriptive circulars, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.

Horses, Mules & Shetland Ponies

I both buy and sell mules and horses. Have on hand at all times mules to hire in carload lots. Also breed Shetland Ponies, and have several weanling colts and a few well broke ponies for sale.

J. L. MENDENHALL,
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Jack Rogers 4576

Won First Prize at State Fair in 1911 in saddle class, 2 years and under 3, and also won second in combination ring among aged horses. He fills the eye of lovers of good horses. I stand him at the low sum of \$20.

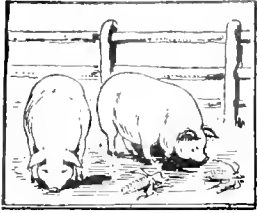
Also Col. Rogers (3287) at the same price.

Their colts will sell at sight to any one wanting a fine saddle colt.

J. T. RAGSDALE

Breeder and Trainer of Five-Gaited Saddle Horses.

MERCED, CALIFORNIA.



THE SWINE HERD



Hogs for Profit on Pacific Coast Farms

"Hogs for Profit on Pacific Coast Farms" is the title of a booklet published by the passenger department of the Southern Pacific Company at San Francisco, Cal. The object of the booklet is to encourage hog raising on the farms of certain Pacific Coast States, with a view of making the home production of hog products more nearly equal what is consumed.

The booklet is gotten up in very neat shape, and is well illustrated. The articles contained in it are by practical men, who give some valuable suggestions regarding methods of breeding, feeding and care of swine.

The main article is by Professor J. I. Thompson of the Division of Animal Industry of the University of California, who goes into considerable detail in handling the subject, "California as a Hog-Producing State." Mr. Thompson lays particular stress upon the advantages of California over Eastern states as regards climatic conditions, and emphasizes the importance of proper selection of foundation stock.

The following portion of the article contains practical advice that will be appreciated by many of our readers:

Age to Breed.

Sows should not be bred to farrow until they are at least 12 months old. This means breeding at about 8 months of age, for the period of gestation is approximately four months, and young sows should be required to produce but one litter the first year. After that they can readily produce two litters each year provided they are properly fed and handled. In order to do this the pigs should be weaned when about 8 weeks old, and the sow rebred as soon as she comes in heat. Most sows do not come in heat except on the third day after farrowing until the pigs are weaned, so if two litters are to be raised the pigs must be weaned when 8 or 9 weeks old and the sow carefully fed to build her up rapidly or she may not show evidences of heat for some time.

It has been proven that older sows produce more and heavier pigs than young sows, and their pigs gain faster while suckling. So it must be a mistake to sell all of the sows after they have produced one litter and depend

on young untried gilts for the next crop.

Old sows sometimes become so heavy and fat that they lie on many of their pigs. Oftentimes too they get deaf or blind, which helps to contribute to the same trouble. The farrowing pens should always have a railing running around inside them about six inches from the wall and about six inches from the floor so that the pigs will not get caught behind the sows. The bedding should be fine and not too plentiful in order that the little fellows will not get entangled in it and crushed by the mother when she lies down.

Pigs may be farrowed during any month of the year in this State so far as weather conditions are concerned. However, it is not advisable for them to come during the hottest weather in July and August, and it is just as well to have the spring litter arrive near the close of the rainy season rather than earlier. The dates of reckoning the ages of pigs for the fairs and stock shows are March 1st and September 1st, so that breeders who contemplate exhibiting should have their pigs farrowed as soon after either of these two dates as possible.

The sows should be bred so as to farrow as closely together as possible, for the pigs not only look better if they are about the same size, but they also do better. Where some are large and some smaller, the larger ones crowd the little chaps away from the trough and get more than their share of the feed.

Care, Feed and Management of Sows.

Young sows intended for breeding purposes should be separated from the rest of the pigs when about six months of age and kept in pasture. They should be fed a medium grain ration to keep them growing. If barley is not too high in price, it should be fed, two parts of it to one of shorts. This mixture can be fed wet or dry, but the barley should be rolled or ground. Wetting or soaking prevents some waste, for less grain is then rooted out of the trough. If soaked, twelve hours is sufficient. Corn is just as desirable as barley, but it is not available in many parts of the State at present. When the above are high in price, oats will do, but are rather too

bulky to be as valuable for hogs as either barley or corn. The sows should be kept growing and in vigorous condition, and the same feedings continued until near farrowing time. Skim milk is valuable for hogs of any age, but it is most economical when not more than three or four pounds is fed for each pound of grain. If pasture is not available for these growing sows some concentrate, high in protein, like soy bean meal or tankage should be fed with the grain. If the former is used, one pound may be added for every nine or ten pounds of grain.

The boar should not be exceptionally heavy in comparison with the sow, or a breeding crate will be necessary. A boar may be used on a limited number of sows when only 8 or 9 months old, but should not be used heavily until matured. When matured he may be permitted to serve two sows per day for a time, but one each day is sufficient if used for a considerable length of time. The boar should be fed a grain ration similar to the one recommended for sows, and should be allowed plenty of exercise. If he is too restless after a few sows are bred, it is often advisable to leave a sow with him after she is out of heat. Sows normally show evidences of heat every twenty-one days, and if not bred may remain in heat for two or three days at a time.

Sows that are too fat or that are too thin and weak at farrowing time may experience some difficulty and should receive attention. For twenty-four hours before farrowing the feed should be light and none given at all for twenty-four hours afterward. They should, however, have an occasional drink of water. After that a light grain ration should be given, and this should be increased gradually so that the sows will be on full feed in about two weeks. The idea is to stimulate the mammary system no faster than the pigs require an increased flow of milk.

Cannibal Habits.

The habit of pig eating by sows is usually due to a lack of protein in the ration before farrowing. Some tankage in the ration prior to this time will usually insure against this trouble. The sows should be kept in separate pens until the pigs are at least two weeks old. After that they may be

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Recorded Mule Footed Hogs are very prolific as well as less susceptible to Swine Diseases. Their great vitality, large litters and quick growth make them the coming hog. **JOHN H. DUNLAP,**
Box 499, Williamsport, Ohio.

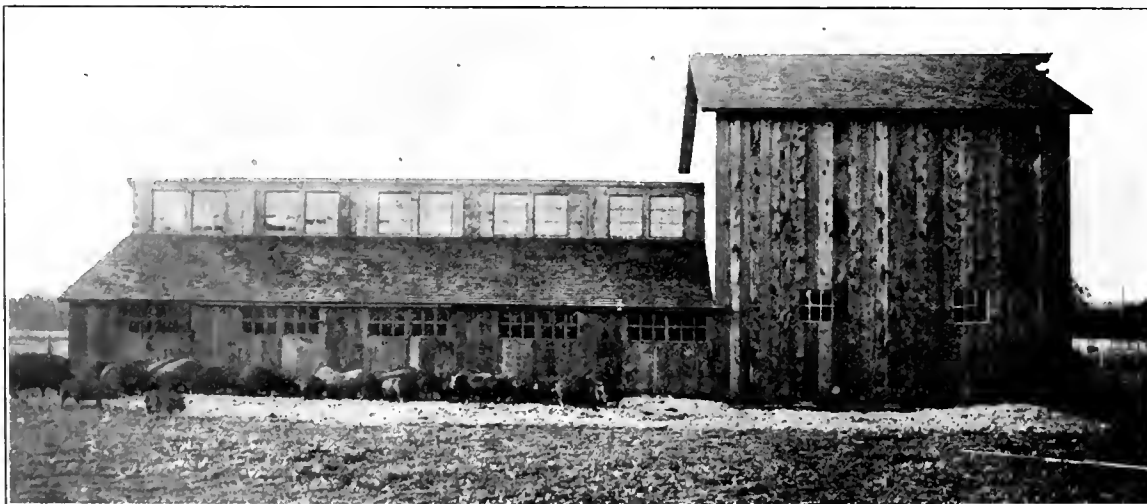
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**BREEDER OF SHORTHORN CATTLE,
POLAND CHINA HOGS,
SHROPSHIRE SHEEP**

T. J. GIBSON

Proprietor



A Substantial and Convenient New Swine House Recently Built by N. Hauck, Altan, Humboldt County, Cal.

Mention The Live Stock and Dairy Journal When Writing to Advertisers.

allowed to run together if the pigs are about the same age. If not the older ones are liable to rob the younger ones. Should one sow have only three pigs and another nine, it is advisable to even them up. This must be done when the pigs are very young, else the sow may not claim the strange pigs, and these same pigs may refuse to nurse the foster mother.

Litters and Their Care.

Large litters are desirable if the sows can raise them properly, but an average of six or seven strong, vigorous pigs to the litter for the entire herd is more desirable than an average of eight or nine moderately thrifty or inferior ones. When the pigs are about four weeks of age they will begin to eat from the trough with their mothers, and should be provided with grain or skim milk in a separate trough.

Remember that pigs make their cheapest gains while nursing, so that the larger the gains at this time the more economical they are.

A summary of experiment station results shows that it takes 33 per cent more feed to produce a pound of gain on a 300 pound pig than on a pig under 50 pounds.

The following rations are valuable for brood sows while suckling pigs:

- 1—Barley 2 parts, shorts 3 parts. Mix with water.
- 2—Barley 1 part, skim milk 3 parts.
- 3—Barley, oats and shorts equal parts, alfalfa pasture.
- 4—Barley and shorts equal parts, alfalfa pasture.
- 5—Barley 9 parts, tankage 1 part.
- 6—Corn 2 parts, shorts 1 part. Add 5 per cent oil meal.

Any of the above rations can be improved by the addition of skim milk in the proportion of three parts of milk to one part of grain. More than that

a weight is more than possible and can be easily attained.

Alfalfa Pasture.

The value of alfalfa pasture for growing young pigs can hardly be over-estimated. This green succulent feed furnishes the protein necessary for the muscular development of the pig, and also provides an abundance of lime and phosphorus, the two materials so essential in bone building. The result is that the California hog breeder need not worry about his hogs being too light boned to carry their weight properly, and he is spared the expense of buying commercial feeds, high in mineral matter and correspondingly high in price with which to supplement his grain.

Remember that the younger the pig the more economical he makes his gains, so they should be crowded from the start. The digestive capacity of the hog is small compared with the sheep and cow, which explains why he will gain very little on pasture alone. But this same pasture, where he gets plenty of exercise and fresh air, furnishes him a maintenance ration and enables him to make the most out of the grain fed in conjunction with it, producing the most economical though not necessarily the largest gains.

Other articles in the booklet are: "Possibilities of the Hog Industry in Oregon," by E. L. Potter, Department of Animal Husbandry, Oregon Agricultural College; "More About the Hog in Oregon," by A. J. Wells; "Hogs in Nevada," by Professor Gordon H. True, Director Agricultural Experiment Station, University of Nevada; "Swine Growing in Arizona and New Mexico," by Professor F. W. Wilson, Arizona Experiment Station Farm.

A copy of the booklet will be mailed to interested persons addressing Passenger Department S. P. Co., San Francisco, Cal.

FEEDING POTATOES TO SWINE

On account of the heavy potato crop and the low market price, many people are asking about the value of spuds for stock feed. The Animal Husbandry Division of the State College at Pullman has received daily during the last few weeks several inquiries of this sort.

On account of their large water content, potatoes alone are not suitable for feeding swine. Experimental results at many stations have shown that one pound of grain is equal to about four pounds of cooked potatoes or four and one-half pounds of potatoes raw. On this basis anyone can figure out the probable return of potatoes when fed to hogs. They must be fed with grain to return satisfactory results. Probably not more than four pounds of potatoes should be used for each pound of grain where rapid gains are desired.

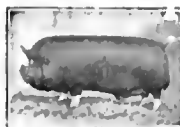
As is well known, potatoes should be cooked, using as little water as possible, mashing them and mixing in the grain while the potatoes are hot. A little salt should be added and the mixture fed to the hogs while still warm. If the grain is corn or barley, the addition of some tankage should increase the gains and decrease slightly their cost.—Washington Agricultural Experiment Station Bulletin.

Officials of the Tulare County Humane Society have made known their intention of prosecuting cattlemen of that section who turn their stock out on the hills when there is not sufficient feed to satisfy them. In the past many cattle have died for lack of feed in off seasons. Such cattlemen figure that if there is a good season their profits will be large, while in a poor season it is cheaper to let the stock die than to buy feed for them.



FOUR OAKS STOCK COMPANY

Woodland, California



BREEDERS OF BERKSHIRE, HAMPSHIRE AND POLAND CHINA HOGS.

Of the Very Best Strains.

Our Herd Boars are Artful Masterpiece (110970) by Masterpiece (77000), and Ravenwood Longfellow 10th (136130), by Longfellow's Rival 5th (121891). Our sows are of equal breeding and merit. Come and see for yourselves. Twenty-two trains pass our door on the Sacramento and Woodland Electric Railroad every twenty-four hours. Stock for sale at all times.

DUROC JERSEYS AT MODESTO

BOARS, SOWS AND YOUNG STOCK FOR SALE.

Registered Duroc Jerseys. No better anywhere. Write for prices. Have stock for immediate delivery. Address:

JOHN P. DAGGS

BOX 5, R. F. D. 5 (One Mile North of Town), MODESTO, CAL.

BERKSHIRES

A grand lot of richly bred pigs of both sexes for sale. Express prepaid. Also lot of good service boars offered cheap. Satisfaction guaranteed.

A few tried and proven brood sows and bred gilts priced to sell. Write us your needs.

WEAVER STOCK FARM, BRAWLEY, CAL.

REGISTERED

POLAND CHINA SWINE

PRIZE WINNERS

Finest Stock in the State from \$30 up

M. BASSETT, Breeder

HANFORD, CAL.



IOWA WONDER.

Heading Purebred Poland China Herd Owned by N. Hauck, Alton, Cal.

is not economical. All of the above proportions are by weight. The sows should be fed as much as they will clean up twice a day, which will probably be from five pounds to seven pounds of the grain mixture.

Feeding Pigs.

When the pigs are old enough to wean they should be separated from their mothers at once and fed liberally. Some skim milk is more essential at this time than at any other, and supplemented with grain and alfalfa pasture, should and does produce rapid and economic results. The ration should be reduced for a few days when the pigs are removed in order to stop the milk flow. If the sows are young they should be put on pasture and fed sufficient grain to keep them growing and not be rebred until about twenty months of age. If they are mature they should be rebred once and well fed in order that they will not only regain the condition they have lost while nursing the last litter, but also receive plenty of nourishment for the developing foetus. If these are spring pigs, weaned about May 1st they should by all means be put on alfalfa pasture and fed a medium grain ration if intended for market. The market pigs should average 225 pounds by the last of October when 8 months of age, and since that is the most desirable weight for the market requirements they should be sold at that time. Such



SUNNY SIDE STOCK FARM BERKSHIRES

My herd contains more Champions, more Descendants of Champions and more Parents of Champions than any other herd on the Pacific Coast.

G. A. MURPHY
PERKINS, SACRAMENTO COUNTY, CAL.



BELLA VISTA STOCK RANCH

GUERNSEY CATTLE, HAMPSHIRE SWINE.

Registered Purebreds of Both Sexes for Sale.

J. W. HENDERSON,
503 First National Bank Bldg., Berkeley, Cal.



Quality Berkshires

Oak Grove Berkshires are the large, growthy, vigorous, money-making type. They carry the blood of Masterpiece, Black Robinhood, Silver Tips, Premier Longfellow and Empress, names that mean quality wherever Berkshires are bred.

We are able to quote you the best Berkshires at the cheapest prices.

Further information cheerfully given.

Oak Grove Dairy Farm, Woodland, Cal.

I'LL TAKE POLAND CHINAS FOR MINE.

(By R. Rotramel, Willows, Cal.)
A poem composed by J. P. Daggs
In your worthy paper he made great
brags
About his Duroc Jersey swine,
But I'll take Poland Chinas for mine.

With his coal black coat of glossy hair,
His six white points are always there.
He eats and sleeps and will get just as
big,
And can grunt just as much as "The
Little Red Pig."

To speak the truth as near as I can
It's not all in the hog, but most in the
man;
It's the care he takes of his favorite
breed—
The condition of quarters and system
of feed.

The Poland Chinas I like the best,
And I know that they are as good as
the rest.
They respond just as readily to good
feed and care
As do those that have a red coat of
hair.

The Duroc Jerseys are all right, I
know,
But the Poland Chinas are not so slow.
You will find them to rank right along
with the rest,
And I, for one, think them a little the
best.

We can view our homes and mansions
grand,
And our wives and children under-
stand
That the Poland China, grand and big,
Can give just as much as the Jersey
pig.

Now, in conclusion, I wish to say:
Let's help this good work on its way;
Let's show the readers away back East
That they have nothing on us in the
least.

HUMBOLDT COUNTY POLAND CHINAS.

Humboldt County, Cal., is the home
of a herd of excellent Poland China
swine, and although the herd has never
been shown outside of the county
there are some individuals in it which
would make a strong bid for honors
at our best fairs.

This herd has been built up through
several years of careful breeding by
N. Hauck. At the head of the herd
is Iowa Wonder, a fine specimen,
weighing 632 pounds at 18 months.
This boar was bred by H. Fesenmeyer
of Iowa, and is sired by his noted
boar, A Wonder. Mr. Hauck also has
in his herd a stylish son of Banker's
Model, and is breeding him to a num-
ber of Iowa Wonder gilts. This cross
should produce some great quality.

The Hauck home is beautifully situ-
ated and improvements have been
completed and are now under way
which make it a highly efficient
breeding farm.

The swine barn, an engraving of
which appears in this issue, is thor-
oughly practical and sanitary. The
high part in front is used to store
feed and bedding. The low part con-
tains ten pens, five on each side, with
an eight-foot feeding alley in the
center. The floor is of concrete with
movable wooden top floor in sleeping
quarters, and water is piped through-
out the building. The windows are all
on the south side, and the pens on
the north side are allowed additional
sunshine through the row of windows
near the top of the building.

The location of this excellent herd
in Humboldt County makes it con-
venient for the average farmer to buy
good purebred Poland China boars and
gilts right in the county, and does
away with the rather inconvenient
shipping in from distant points.

A Big Question

The Live Stock and Dairy Journal—
I am here only contemplating the in-
vestment of some money in the hog
raising industry and would appreciate
any information along the line of
the following questions.

1—To make the hog business a pay-
ing venture what number would it
be necessary to feed and sell annu-
ally, taking into consideration pro-
portionate profits with proportionate
increase of stock?

2—How much acreage is necessary
for a certain number of hogs?

3—How much does it cost to raise
a hog from birth to market?

4—How much does a good brood
sow cost (6 months to 1 year old), and
does the Mulefoot cost less or more
than other breeds? Also what is the
price of boars?

5—With a good foreman how much
help is necessary per certain number
of hogs, i. e., how many hogs can one
man handle?

6—Which, in your estimation, is
the best part of California to raise
hogs within a radius of one hundred
miles of San Francisco.

Any further information pertaining
to the industry, such as the best fat
producing feeds, etc., will be greatly
appreciated.—S. W. M., Oakland, Cal.

The best answer that can possibly
be made to your questions must of
necessity be quite general in charac-
ter, for conditions are so variable that
hard and fast advice laid down to
cover conditions on one farm might
be wholly unapplicable to an adjoining
one.

1—You might not make the swine
business pay with any number of hogs.
It depends entirely upon conditions.
We do not think a ranch devoted en-
tirely to the raising of hogs for the
market, with no dairy, city swill or
skim milk could be made a paying
proposition. If you can feed and ma-
ture economically as with alfalfa,
skim milk or other by-products you
can probably carry about five head of
swine for every cow milking.

As an independent proposition with-
out dairy or orchard we would not
advise any one to go into swine rais-
ing heavily, unless he were located on
land that would yield well with corn,
barley, wheat, pumpkins, beets and
other quick growing feeds. Alfalfa
alone would probably not give satisfac-
tory results in the end.

Land is high, and while it probably
never will be lower than it is now,
you must figure rent or interest, taxes,
labor, buildings and risk of loss by
disease.

The latter is probably the most im-
portant, as one month of disease may
practically put a swine breeder out of
business. Hogs may be rendered im-
mune from cholera by the hog cholera
serum treatment, but this does not
render them immune from other dis-
eases. There is no breed of hogs im-
mune from cholera unless made so,
either by treatment or good care. Good
care means keeping free from para-
sites and in good health.

2—You do not state the nature of
your acreage. Swine to be profitable
must not be put on land that is not
producing well. The climate also must
be considered, also the season of the
year.

We would suggest that the number
of swine at the start should be small
enough to stand an increase if condi-
tions are found to be satisfactory.
Seasons, crops, rainfall and prices of
grain, also price of pork, have much
to do with this. There are times when
the price of alfalfa hay is so high that
it would not pay to run hogs on alfalfa,
and at other times the condition is
reversed.

3—Some growers claim that alfalfa
hogs can be raised for less than 5
cents per pound. However, it takes
something over a year to get market

Grape Wild Farm Herd of Berkshires

Herd headed by:

Double Premier (88215), a son of Premier Longfellow.
Mayhews Masterpiece (134906) and Grape Wild Master
(134907), both sons of Masterpiece (77000).
Superior Star (145224), a son of Berryton Duke, Jr.
The sows in the herd are equally as well bred.

STOCK OF ALL AGES FOR SALE

A. B. HUMPHREY Mayhews, California
Farm located eight miles east of Sacramento on Folsom road.

TAMWORTHS

THE BACON BREED

Pigs for immediate delivery.

Kennedy Bros. Amsterdam,
Merced County, Cal.

CALIFORNIA POLYTECHNIC SCHOOL

BREEDERS OF

**HOLSTEIN AND JERSEY CATTLE, POLAND CHINA AND
BERKSHIRE HOGS, PERCHERON AND CLYDESDALE HORSES**

YOUNG STOCK FOR SALE

Address Animal Husbandry Department, California Polytechnic School, San Luis Obispo, Cal.

FIFTEEN YEARS OF CAREFUL BREEDING.

SATISFACTION ACCOMPANIES ALL SALES.

GEORGE V. BECKMAN

Importer and Breeder of Registered Poland-China Hogs
LODI, CALIFORNIA

Herd Boars: Golden Meddler and Randolph.

Residence Phone, 22F14.

Swine Farm Phone, 43F15.

POLAND CHINA SWINE

I have for sale pigs of both sexes sired by my boar, Great Prospect (57949) out
of sows sired by A. Wonder. For prices write or call.

BROWNING STOCK FARM, WOODLAND, CALIFORNIA.
W. H. BROWNING, Prop.

DUROC Jersey Swine

Young stock of both sexes for sale, sired by
Junior 1st (121831), who is the sire of my young
herd which won the Duroc Jersey Association Spe-
cial Prize at the 1912 California State Fair.

Write for pedigrees and prices.

ED. E. JOHNSON

Pure Bred and Registered

R. 2.

TURLOCK, CAL.

J. FRANK SMITH & SONS

Breeders of REGISTERED DUROC-JERSEY SWINE.

Young stock for sale, out of dams of choice breeding and sired by two great boars,
Billie Rosebud, Jr., No. 89729, and Nebraska Sensation, No. 108661. These boars
carry the blood of great winners and producing hogs.

We also offer a number of Bred Gilts, sired by Nebraska Sensation and bred to
Col. Chief. All stock guaranteed to be as represented. Address.

H. H. SMITH, Mgr.,

Route No. 1, Box 42.

Hanford, Cal.

HAMPSHIRE SWINE

My Hampshire Hogs have been selected with great care, and
my herd is one of the oldest in America. Herd headed by El
Salvator, winner of two silver cups in the strongest competition
of the Middle West. Fifty young sows and boars for sale. This
breed has won over all others in the dressed carcass contest for
several years at the International Fat Stock Show.

Frank Reed Sanders,

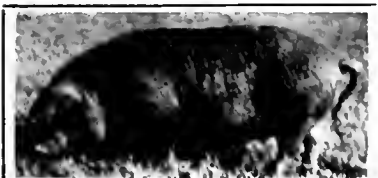
SALT RIVER VALLEY,

MESA, ARIZONA.

Square Mesh and Diamond Poultry

FENCING

Our Free Wholesale Catalogue shows all styles. Send for it and save money.

OLD HICKORY SUPPLY CO.,
Dept. 11. San Francisco, Cal.**Duroc Jersey Swine**
From the Old Reliable Herd

Herd headed by King Golden (1114919), Reserve Champion 1912 California State Fair, and out of dams that were never defeated. Boars ready for service. Gilts open and bred. Young stock of both sexes for sale. Prices right and satisfaction guaranteed.

J. K. Fraser, Box 142, Denair, Cal.

Poland Chinas

I offer for sale fifty fine pigs farrowed in June and July.

W. Bernstein

HANFORD,

CAL.

DUROC JERSEY BOARS

Sired by Our Grand Champion Boar at California State Fair.

H. P. SLOCUM & SONS,
R 1, GLENN, CAL.**MULEFOOT HOGS**

Prolific and hardy. Try one of our Boar Pigs and you will be satisfied. Have some pure blooded pigs. Have also a few half-bloods at reasonable prices. Orders and inquiries receive prompt attention.

BRYANT BROS.

Lemoore, California

HILLMONT FARMHigh-Class Registered
BERKSHIRE HOGS

Write for Information or Come and See.

CHAS. GOODMAN, Williams, Cal.

Knob Hill Stock Farm**REGISTERED POLAND CHINA SWINE**Stock of Various Ages, Both Sexes
For Sale

A. M. Henry, Proprietor Farmington, Cal.

S. B. WRIGHT

SANTA ROSA, CAL.

**BERKSHIRE HOGS, DORSET SHEEP
TROTTER HORSES**Breeder of Sonoma Girl 2:05%
Charley Belden 2:08%, etc.Farm 2 miles west of Santa Rosa on the
Electric Railroad. Fare, 5 cts.

size on alfalfa hogs, and they do not bring top prices then. It takes about five pounds of barley to make one pound of pork, so at present prices but little grain can be fed for pork, as other grains cost about the same per pound of pork produced.

4—Pure-bred gilts safe in pig can be bought at prices ranging from \$10 to \$16 each, the higher prices being for show stock. You should get good ones of any breed for around \$50 each. Mulefoot hogs of the same quality should cost about the same. Supply and demand control the price, and a large shipment can be bought at a discount.

Boars can be bought from \$25 up, according to age and breeding, and the selection of boars is of great importance.

5—With convenient improvements and locations, a good man could care for five hundred head of hogs, with a little additional help occasionally to clean up and move stock from one lot to another. He would need water and feed for brood sows handy and good buildings and fences.

6—Anywhere near the railroad where you can get the most suitable ranch at a reasonable price. The ranch suitable for your purpose will not be cheap, and you must figure this in estimating profits. As likely localities within the radius you mention we have in mind the lands near the towns of Woodland, Davis, Dixon, Sacramento, a large portion of San Joaquin County, around Santa Rosa in Sonoma County, many parts of Santa Clara County and portions of Alameda County.

Corn, barley and wheat are used for fattening hogs, but available corn in California is too costly to be a profitable feed, even to finish for the market. Barley is the most generally used grain as a hog feed. Rolled wheat is very good and is cheaper than middlings.

Butchers do not seem to want to pay any more for a grain fed hog than for one raised on alfalfa and milk, so under those conditions we would say, get a good alfalfa ranch, stock it with good dairy cows and raise the hogs as a side issue, and you will not miss what they eat.

In conclusion we will say that there is a present demand for hundreds of thousands more hogs in California, a demand which is at present supplied by the importation of Eastern pork. These hogs can be raised in California at a good profit to the grower. But in considering the raising of hogs for pork, one should not lose sight of the real place the hog occupies in farm economy. The production of pork reaches its highest point of economic efficiency on the dairy farm as a part of the dairying business.

**MORE NEW BERKSHIRE BLOOD
FOR GRAPE WILD FARM.**

C. J. Maurer, herdsman at Grape Wild Farm, Sacramento County, Cal., attended the Sittyston Grove sale of Berkshires in Illinois October 24th and bought seven sows of uniformly high breeding. The Berkshire World says, in its report of the sale:

"One of the best buyers at this sale was A. B. Humphrey of Sacramento, Cal. Mr. Humphrey was not present at the sale, but was represented by his farm manager, who used discretion and judgment in his choice of animals. He was a good bidder on a number of them, and when he once made up his mind that he wanted an animal he nearly always got it. Price did not stand in the way of purchasing what he liked. He procured several good sows, two or three of them to be bred to Schoolmaster 2d and Rival's Lord Premier.

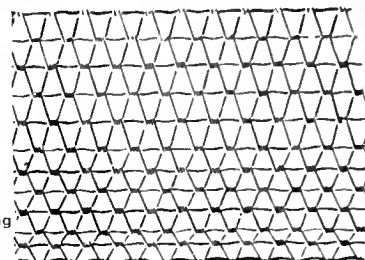
"It is often said that animals sent from the Cornbelt to the West are no credit to the breed or to the breeders (Continued on page 18, column 2.)

Howard Cattle Company

641 Mission Street, San Francisco

**PEDIGREED
LIVE STOCK**

The Berkshire Sow pictured is one of a number out of which we have some first-class Berkshire Pigs.

**GLENVIEW
Poland Chinas****YOUNG STOCK FOR SALE**
One Good Yearling Boar, Prices Right
Chas. R. Hanna, R 3, Riverside, Cal.**THIS
FENCE**Is bull proof, sheep and hog tight.
It's made of heavy coiled steel spring wires.

It is the popular fence among careful and shrewd buyers who want the BEST.

Coiled Spring Steel Wires; Good Galvanizing and Honest Construction are qualities of KOKOMO FENCING.

Give us that order NOW. We will ship it on ten days' free trial if you wish.

Catalogue and prices mailed on request.

CALIFORNIA ANCHOR FENCE CO.,810 MAIN STREET,
STOCKTON, CAL.**Stump Pullers****CALIFORNIA STUMP PULLER CO.**

704 BRYANT STREET.

NEW CATALOGUE JUST OUT
MAILED FREE ON REQUEST

SAN FRANCISCO

**For Your Hogs
DIGESTER TANKAGE**Digester Tankage develops bone and muscle in young pigs and **MAKES THEM GROW**. It fortifies and strengthens the system against attacks of disease germs so that Tankage-fed swine seldom suffer from epidemics. It imparts such fit and finish to "show" swine and market hogs that it never fails to develop blue ribbon winners in the show ring and toppers in the market.

As a balancer in making up the ideal ration it is without a rival.

For full particulars and prices address:

The Western Meat Company

Animal Food Dept.

San Francisco, Calif.



SHEEP



Call for the Annual Convention of the American National Live Stock Association

To Members and All Live Stock Associations and Live Stock Producers:

Call is hereby made for the sixteenth annual convention of the American National Live Stock Association, to be held in Phoenix, Ariz., January 14, 15 and 16, 1913, convening at 10 o'clock on Tuesday, January 14th.

The Phoenix Board of Trade has appointed a Committee on Arrangements and Entertainment, and at their request it has been decided to devote the first two days, January 14th and 15th, to the business meetings of the association, and the third day, January 16th, to an inspection of Maricopa Valley and other points of interest. The committee in charge has arranged a most interesting program for the entertainment of delegates and their families, and all are assured of an enjoyable time. January is the most delightful month in which to visit Phoenix, and our members will never have a better opportunity to learn of the marvelous growth of that section of the southwest.

The live stock industry was never confronted with more serious problems. There is less live stock in this country per capita than ever in its history. Our exports of beef are practically nothing, and of live cattle only a fraction of what was formerly sent abroad. Prices have advanced and consumers are complaining. There will unquestionably be an attempt in the next Congress to place practically all the products of the farmer and stockman on the free list. This would subject the agricultural and live stock industry to free trade in their products, while other industries would reap the benefit of a duty on their products. It will require the most careful and diligent work by the agricultural and live stock classes to prevent such rank discrimination. Ways and means to protect our interest under the tariff will be fully considered at the Phoenix convention.

This country with its vast resources is capable of furnishing all the meat food products needed for home consumption, and to supply an ever increasing population, with possibly a surplus for export. There are many reasons contributing to the present shortage of cattle. Our members, and those familiar with live stock conditions in the West, well know that one of the important reasons for the decline in the production of live stock in the West is the very unsatisfactory range conditions. If the policy of this association for federal control of the semi-arid unappropriated public grazing lands was enacted into law, there would be a large increase in the number of head of live stock raised on Western ranges. In view of the present high prices for live stock, it is believed that Congress will soon heed our request for a reasonable and sane control of that vast portion of the West unfit for anything but the grazing of live stock. Such a settlement of this much misrepresented range question will partially solve the problem of future beef supply. The removal of duty on meats and live stock could at best only temporarily affect prices here, and would tend to lessen the production of live stock in this country, and the ultimate result would be higher prices than now prevail.

Congress owes a duty to the consumer as well as producer to enact such laws as will not only conserve Western ranges, but increase the production of live stock. The legislation we ask for will do this.

Among the questions for consideration at our annual meeting are the following:

Import duties on live stock, meat products, wool and hides.

Control or disposition of the semi-arid unappropriated public grazing lands.

Classification of the public domain and investigation of land conditions in the West by a special committee of Congress.

Railroad rates on live stock from intermountain country to Pacific Coast points.

Cases involving live stock rates pending before the Interstate Commerce Commission.

Rules governing transportation of less than carloads of live stock.

Railway service on live stock.

Advance in commission charges for sale of live stock.

Margin between what the producer receives, for his live stock and what the consumer pays for his meat products.

Sanitary conditions of live stock and control of contagious diseases.

Meat inspection tax.

Tax on oleomargarine.

And many other subjects of national importance to the stockmen of the West. All these questions will be open for full discussion.

The railroads have promised to grant reduced rates to our convention. Members will be fully advised by circular letter of the basis of fares agreed to. Full information as to hotel accommodations, etc., will be furnished on application to the Phoenix Board of Trade.

All live stock producers are cordially invited to attend our convention.

By order of the Executive Committee.

H. A. JASTRO,
President.

T. W. Tomlinson, Secretary, Denver, Col.

VICTORY FOR CALIFORNIA SHROPSHIRE.

The Live Stock and Dairy Journal—In Oregon we sold the champion ram at the Oregon State Fair and were beaten out for champion ram by Frank Brown of Carleton, Ore., at Spokane.

Our winnings at Spokane Interstate Fair were as follows:

Aged rams, second and third; yearling rams, first and third; ram lambs, second and fourth; yearling ewes, first and second; ewe lambs, first and third; flock, first and third; pen of lambs, second and third; champion ewe.

At Boise Intermountain Fair our winnings were:

Aged ram, first; yearling rams, first and second; ram lamb, first and third; aged ewes, first and second; yearling ewes, first and second; ewe lambs, first and second; flock, first and second. Sweepstakes—Pen of five ewes, any breed (for mutton), first; pen of five ewes, any breed (breeding type), first; champion ram over all breeds,

first and second; champion ewe over all breeds, first and second.

California Shropshire breeders have made excellent progress in the last few years. As an instance we showed two remarkable yearling ewes this year, an imported ewe which won first as a lamb at the Chicago International, 1911, and a California-bred ewe. The California-bred ewe was champion at three fairs, the imported ewe champion at two.

Professor Carlisle, who judged them at Boise, Idaho, had a hard time to decide which to place first, finally awarding the ribbon to the California-bred ewe, and afterwards placing them first and second for champion over all breeds.

Mr. McLay, a prominent Eastern breeder who judged them at Spokane, was so favorably impressed that he delivered a lecture to agricultural students on them. He considered them two of the finest specimens of Shropshire ewes that he had ever seen. In the course of his lecture he said that California should be proud to have produced such a noble specimen of the breed.

Mr. Harding, one of the largest importers of Shropshire sheep in the country, saw the flock at the California State Fair. He said that the first prize ewe lamb was the second best he had seen in the country this year. Yours truly,
BISHOP BROS.
Centra Costa County, Cal.

The Live Stock and Dairy Journal—Since the Sacramento State Fair I have made a trip over Canada clear to the Atlantic Coast and home. While in Montreal I helped W. M. Carruthers ship twelve head of high-class Holstein cattle to Australia.

We left Montreal together on the 29th of October, headed for the Harris sale of Herefords, Harris, Mo. There we met T. B. Gibson, and we all participated in securing a car of registered Herefords for California breeders. We secured ten nice young registered heifers for H. Gable of Yolo County, who is starting out in the Hereford business. We also purchased one of the best calves in the sale for J. Frank Adams of Oregon, to head his select herd of registered Hereford cows. This young bull is of rare breeding and a fine individual. We also secured for the Newhall Land and Farming Co. some good, strong, growthy bulls for their San Luis Obispo County ranch. We also helped secure for the White Lumber Company of this State three very select bulls, one of which cost \$1000. This young bull, Donald Lad by name, was a winner in the Harris show herd at the Middle West shows this year. We also secured some high-class Berkshire sows from Professor Curtis, Ames, Ia., for Mr. McFarland of San Mateo. We also purchased some nice Durocs for Pacific Coast breeders.

The plums of the car were two Shorthorn bulls. The one purchased by T. B. Gibson to head his own herd; the other purchased by W. M. Carruthers to head A. W. Foster's small herd of Shorthorns which he is building up in Sonoma County. These two young bulls are half brothers, sired by the great Ringmaster, owned by Leslie Smith, Minn. I believe these two young bulls to be the best pair that have crossed the Rockies for many a day, and I will surely miss my guess if they are not heard from

next year in the California show ring.

Since returning I have made the delivery of these separate bunches of stock, and found nothing but satisfied customers.

E. K. BROWN,
Yolo County, Cal.

SALES OF NEWMAN HEREFORDS

The Simon Newman Company of Newman, Cal., recently sold six young registered Hereford bulls to Trift Brothers, Wheatland, Cal., one to William Clark of Humboldt County, and one to James Walker of Fresno County. The prices at which these sold were right around the \$200 mark per head, a very reasonable figure considering the quality of the stock.

From January 6th to February 14th there will be held at Pullman, Wash., the winter school of agriculture, horticulture, forestry and home economics. Railways of the state serving Pullman, Wash., have granted a fare of one and one-third for the round trip, given on the certificate plan. Upon departing for Pullman persons will pay full fare, and should request a certificate. Upon presentation of the certificate at the Pullman station the returning ticket will be sold for one-third the full fare.

WILL ASK FOR BIG APPROPRIATION TO AID AGRICULTURE.

The University of California wants to have the best department of agriculture in the United States, and will ask appropriations from the next Legislature to accomplish this end. Provision will be needed for teaching agriculture at Berkeley and at the farm school at Davis, for disseminating among the farmers knowledge of improved agricultural methods, and for experimental work in all the varied problems that face the California farmer. The University extension work in agriculture should be more actively prosecuted than ever before. Lecture and study centers should be founded all over the State if only adequate funds can be secured.

BEST MARKET PRICES PAID FOR PELTS, FURS AND MOHAIR

Reference: Exchange Bank, Santa Rosa.

MAURICE MEYER,

P. O. Box 325 Santa Rosa, Cal.
Street Address, 1014 Second St.

Frank A. Mecham

Breeder and Importer of
Shropshire, Rambouillet
AND
American Merino
Sheep

RED POLLED BULLS FOR SALE

Take electric car at Petaluma or Santa Rosa for Live Oak Station.

Address,
FRANK A. MECHAM,
Petaluma, Sonoma Co.,
Phone Rural 166 California

SILOS INSURE INCREASED PRODUCTION OF BEEF, MUTTON AND PORK AND ADDITIONAL DAIRY PROFITS.

That the silo has become inseparably associated with live stock husbandry wherever it is properly introduced is a well demonstrated fact, emphasized by reports from various districts where silos are being generally adopted.

In this connection the Journal recently received a letter from J. M. Trunnell, an expert silo man of Swisher County, Texas, who has had twenty years' experience with silos, and who knows the advantages of ensilage "from the chicken to the mule." Mr. Trunnell says that when his company sent him two years ago to act as its general agent for Texas, Oklahoma and New Mexico, and he landed in the territory he was "considered crazy." Last year he and his agents erected fifty-two silos, and this year have sold

over one hundred to date. Mr. Trunnell sends the following article from a local paper, and we are pleased to give it space because it sets forth so many practical points with reference to the advantages of silos:

Silo Beef and Pork Production.

The magnified and munificent values already brought to Swisher, Brisco and Castro Counties by the silo is readily realized by the conservative calculation that the sixty-eight concerned silos will market fatten—in a feeding period of 110 days—over 8000 head of beef steers; about 3000 head of hogs and over 10,000 head of sheep—the hogs merely following the steers in the fattening pen.

An Additional Industry.

Silo sheep feeding and fattening is in itself a new local industry, no systematic mutton marketing being heretofore done in the region. Those embarking in the business are Bruce Kendrick, Judge Hale, Walter Underwood and Crow & Sharp. All of the above named gentlemen, except Mr. Kendrick, will mutton fatten alike wethers, ewes and lambs, while Mr. Kendrick has purchased 2400 head of older ewes whose more or less falling teeth will find no difficulty in masticating the at once soft and succulent ensilage, this perfect fattening of old ewes opening up a new avenue in the preparation of prime market mutton.

Mr. Kendrick purchased these old ewes in New Mexico at \$1.25 per head, and will trail them to Swisher County at an expense of 30 cents per head, and will sell them fattened next January at from \$4.50 to \$6 per head.

Silage Money and Method.

Following is a detailed exposition of silage money returns and silo filling and feeding method:

On a daily ration of 40 pounds of silage, together with 2 pounds of cotton seed meal for hardening and a little hay for roughage, silo fed beef cattle will put on 2 pounds of flesh per day in sixty days; 2 3/4 pounds per day in one hundred days, and 3 1/2 pounds per day in one hundred and twenty days. In other words, a 2-year-old steer weighing 800 pounds and costing \$32 can be silo fattened in one hundred and twenty days to 1100 pounds, with a market value of 6 cents per pound, or \$66, at an average fattening cost of \$11.60 per head, thus leaving a net profit of \$20.40 per head, or within less than \$12 of the original cost of the steer.

One bunch of 198 2-year-old steers fed during thirty days of the coldest weather of last winter sold as feeders with a profit of \$500 on the bunch. These steers put on an average of 75 pounds each in their thirty days' feeding.

Pork Profit.

Silo pork profits are more than equally valuable with those of the beef, the hog following the steer in the fattening pen in the proportion of one porker to two steers, a 10-months-old hog averaging out at 300 pounds, with a market price of from \$18 to \$20, of which at least half is net profit.

Silo-fed lambs, starting in at a weight of 50 pounds, will fatten in ninety days to 90 pounds each, and market out at \$7 to \$8, while goats have doubled their weight in thirty days.

Dairy Dollars.

The silo is a busy corner of dairy dollars, the dairy of J. W. McKinney near Tulla, for instance, adding, on silage feeding, in seven weeks as high as one-half gallon of milk in daily yield per cow, with a proportionate butter return of 6 pounds, as against 4 pounds under former feeding, the silage also adding materially to the value of the cream as a market seller.

Two Ensilage Crops.

Cane, Milo maize, Kaffir corn and Indian corn are all available here for silo ensilage and will produce two ensilage crops per season, the first from spring planting and the second in the fall from ground on which other

HILLCREST STOCK FARM
DAVIS, CALIFORNIA

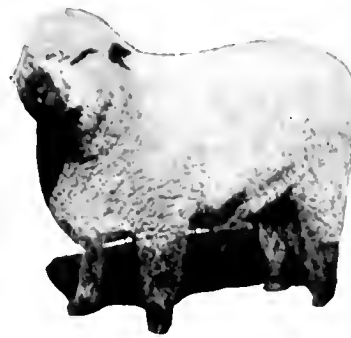
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Breeder of

SHORTHORN CATTLE

SHROPSHIRE and

MERINO SHEEP



HILLCREST LAD
First Prize Ram at State Fair, 1911

OFFERS FOR SEASON OF 1912
AN EXCEPTIONALLY FINE LOT OF
PURE-BRED AND REGISTERED
RAMS, YEARLINGS AND TWO-
YEAR-OLDS.

Wool, Hides, Grain, Dried Fruit, Dressed and Live Poultry Wanted

For the best results and to get the most money out of your different kinds of Produce, ship the same to us. Highest market prices and immediate cash return guaranteed. Send us samples before selling elsewhere. Liberal advances made. Mark and consign your shipments direct to

W. C. PRICE & CO.

Paid Up Capital, \$50,000.
Established 1876.

213, 215, 217 CLAY STREET

SAN FRANCISCO

RAMBOUILLETS

1 OFFER FOR SALE

1400 Yearling Rams

1000 Ewes

Prompt Delivery Correspondence Invited



CHAS. A. KIMBLE

Hanford, California

SHROPSHIRE RAMS

140 Head of Yearling Shropshire Rams.

150 head of Ram Lambs.

These are all of my own breeding, and the choicest lot I have ever had.

Also Duroc Jersey Hogs.

ENTERPRISE FARMS

H. P. EAKLE, JR., Prop. (Phone, Res. 1801.) WOODLAND, CAL.

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Breeders of

Percheron Horses.

Holstein-Friesian, Jersey, Aberdeen Angus and Hereford Cattle.

Shropshire, Hampshire, Southdown, Dorset-Horned, Rambouillet and Cheviot Sheep.

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Correspondence Solicited.

TANKS

TANKS

**WINDELER'S PLANING MILL
AND COOPERAGE**

GEO. Windeeler, Prop.

Water Tanks. Wine Tanks made from carefully selected stock by careful and experienced workmen. "Tanks that are well made last a long time." It will pay you to get my prices before buying.

GEO. WINDELER,

144-154 Berry Street, San Francisco, Cal.



Wine Tank



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Selected Second-Hand

PIPE

Every foot guaranteed. Save one quarter on your pipe by ordering from us. Write for prices.

Alexander Pipe Co., Inc.

1083 Howard St., San Francisco.

**STOCKTON--LODI
SACRAMENTO**

8 Trains Daily Each Way
BAGGAGE CARRIED ON ALL TRAINS.

**Central
California
Traction
Co.**



SOUTHBOUND.

No.	Leave Stockton	Arrive Lodi	Arrive Stockton
7	7:00a	8:45a	9:00a
13	9:10a	10:45a	11:05a
17	10:15a	11:45a	12:05p
23	12:15p	1:50p	2:05p
29	2:10p	3:45p	4:00p
35	4:15p	5:45p	6:05p
41	6:20p	7:55p	8:10p
47	9:00p	10:35p	10:55p

NORTHBOUND.

No.	Leave Stockton	Leave Lodi	Arrive Stockton
4	6:00a	6:00a	8:30a
10	7:45a	8:00a	9:35a
16	10:00a	10:15a	11:45a
22	12:05p	12:25p	1:50p
28	1:45p	2:05p	3:35p
34	4:00p	4:15p	5:45p
40	5:45p	6:05p	7:35p
46	8:30p	8:40p	9:12p

STOCKTON-LODI SERVICE.

Leave Stockton.

A. M.—5:15, 6:10, 7:00, 8:00, 9:00, 10:05, 11:05.

P. M.—12:15, 1:10, 2:00, 3:00, 4:10, 5:05, 6:05, 7:10, 8:20, 9:55, 11:20.

*Daily except Sunday.

Trains Leave Lodi.

A. M.—12:05, *6:05, 7:00, 8:00, 9:00, 10:15, 11:00.

P. M.—12:25, 1:00, 2:05, 3:00, 4:15, 5:00, 6:05, 7:00, 8:40, 9:10, 10:37.

*Daily except Sunday.

DEPOTS:

1024 Eighth Street.....Sacramento
3407 Magnolia Avenue.....Oak Park
Graham's Drug Store.....Lodi
Hotel Stockton.....Stockton

Connections made at Sacramento to and from Northern Electric trains to and from Marysville, Oroville, Chico, Woodland and way stations, and at Herald with Amador branch trains.

At Stockton with Santa Fe for San Joaquin Valley points.

L. H. RODEBAUGH,
Traffic Manager, Stockton.

harvests have already been grown. All of these forage ensilage growths will return from six to eight tons per acre to each crop, and as they sell in the open market at from \$4 to \$5 per ton, are as valuable to the general farmer as they are to the silo stock fattener himself. Alfalfa, wheat and oats can also be silo ensilage used with excellent results.

Forage Preparation.

Forage is prepared for silo ensilage with what is known as an ensilage cutter, which chops the stalks into inch and a half lengths at the rate of fifteen to twenty tons per hour with any desired motor engine used as a driving power, the cutter itself costing \$250.

Silos as a Storage Proposition.

A happy peculiarity of silo ensilage is that, like Democracy, it becomes better as it grows older—gathering nutritive power with each year it is kept over.

This logically means that silo ensilage can be developed as a great storage proposition, with tens of thousands of tons of ensilage stored during any one year, and which will be more profitable as a stock fattener the longer it lasts.

Such silo ensilage in a year of full harvests would also guard against a possible next season of lesser forage growth.

MORE NEW BERKSHIRE BLOOD FOR GRAPE WILD FARM.

(Continued from page 15.)

sending them out, but we believe that the most discriminating breeder would be pleased with the animals that will go to California from Mr. Stanton's sale."

The individuals bought by Mr. Maurer were as follows:

Schoolmaster's Bernice 2d (166700); sire, Schoolmaster 2d (117800); dam, Sittytton Bernice 6th (152235).

Champion Longfellow's Belle (161-409); sire, Rival's Champion (112500); dam, Longfellow's Belle Premier (119489).

Sittytton Duchess 2d (152237); sire, Rival's Premier 6th (104532); dam, Artful Duchess 11th (120978).

Premier Lord's Belle 2d (166605); sire, Rival's Lord Premier (113100); dam, Belle's Rival 5th (159545).

Artful's Longfellow Duchess (166-664); sire, Artful Belle's Rival 3d (133678); dam, Longfellow's Duchess 4th (102607).

Handsome Bessie 10th; sire, Hopeful Lee 2d (122143); dam, Master's Bessie 214th (120219).

Premier Black Girl (161418); sire, Lord Premier 2d (92708); dam, Rival's Black Girl 9th (159554).



None Are Infallible

We're all human beings and therefore liable to make mistakes. If you have any fault to find with "Pacific Service" let us know about it and we'll do all in our power to make things "right."

It is our desire to make you entirely satisfied with "Pacific Service." And the only way we can do this is to have you tell us wherein you are dissatisfied.

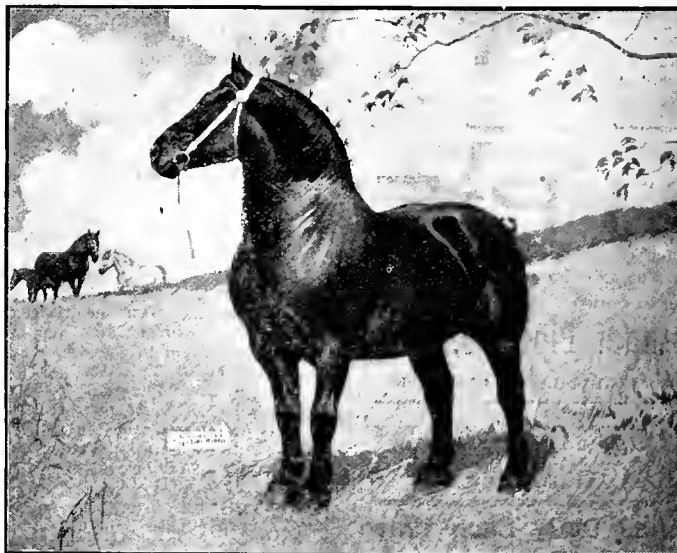
"Pacific Service" Is "Perfect Service"

PACIFIC GAS AND ELECTRIC COMPANY

445 Sutter Street, San Francisco
Or at Any of Our Branch Offices in California

Import Your Own HORSES

Save from \$500 to \$2,000 on each horse



Give us an order and we will bring you from Europe just what you want. The best of stallions will not exceed \$1200. Good stallions from \$800 to \$1000. Good mares for \$450. Mares in foal from \$550 to \$650. We ask no money in advance. Write and tell us what you want and we feel confident we can suit you. If we do not, you are under no obligation to us. We will charge you \$50 profit on mares and \$100 on stallions. They will be of the very best. Every animal's pedigree registered in Europe, and guaranteed to pass any Government or State Inspection Board.

We have just finished delivering eighteen head of Imported Percheron mares and stallions for the undersigned farmers of Ukiah, Cal. Write these gentlemen and ask them how they are suited.

J. L. McCracken, Everett Holliday, J. Ritchey, Charles Crawford, John Crawford, Fred Wall, H. H. Van Noder, F. C. Van Noder, Robert McGarvey, postoffice addresses all Ukiah, Cal.

If you want a span of Imported mares or a stallion of any breed, write us today at Ukiah, Cal. Horses ordered now will reach California the latter part of February.

FRANK S. WEST & SON,

WOOD RIVER, NEBRASKA
HAMILTON CITY, CAL. UKIAH, CAL.

POULTRY DEPARTMENT

Pheasant Growing Offers Unlimited Opportunities

Adapted Especially to Women of Energy.

(Written for *The Live Stock and Dairy Journal* by Emma J. Melette.)

The woman who is in need of cash, if she have energy, ambition and stick-to-it-iveness, can find all of her dreams realized in pheasant culture. Not only is this work remunerative, but it is at the same time intensely interesting.

The woman who dislikes familiarity among her chickens, if she be raising just chickens, will be tickled to death when she finds her baby pheasants flying to meet her, for their habits are so shy that they are never obtrusive, and the favor that they show is appreciable.

Some people think that heredity does not count in people, let alone in birds and animals, but the keen observer who will observe with an unprejudiced eye will soon find out that if the parents are tame the young birds are quite liable to be so likewise; and when they are tame they are mighty nice little things to handle. Individually our breeding birds are so tame that they get pugilistic, and when we go into some of the Ring-neck pens we have to arm ourselves with a stick to keep the males from "jumping" us. When the babies hatch one can pick them up anywhere, and when we go in to feed them they even fly upon the gate when it is opened.

The pigeon growers tame their birds with hemp seed, but with pheasants it takes worms to do the taming—and to perfection, for they love worms better than the average woman who has horticultural proclivities loves flowers.

This worm growing, by the way, is not at all an objection, and entails no disagreeable work, as many might be led to suppose. The best thing to use for growing worms is "plucks." These do not need to be old and spoiled, as is generally understood, for flies like fresh meat, and all that one needs to do is to arm herself with some pans, for which nothing is better than coal oil cans cut in two lengthwise. Then in these pans put some good, clean, moist dirt. Lay the meat on this and in a few days the flies will have gotten in their work, and the meat will be teeming with the life that is the best feed on earth for pheasants, providing that the meat was fresh, and not made of some old, diseased animal. The writer heard of a man once who made worms from an old dead horse and he fed them fresh, before they had had a chance to "clean themselves off," and he lost two hundred of his birds. One feels for a man who makes a break like that, for success is sweet to anyone, and such things hurt. In such a case it is an axiom that a persons' "hind-sight is better than his foresight."

It is a good plan to handle the worm dirt with a big spoon, a long-handled iron spoon. If you dig into the dirt in the pans when the worms

are sizable you will find it literally teeming with worms. If you have the pans setting on the ground, the next day if you look with your spoon again you may discover that every worm has vanished. They have gone into the ground underneath. The way to obviate this is to put the pans in something that the worms cannot crawl out of. The writer happened to find an old zinc trough and a couple of old galvanized tubs lying around, and the worms can always be found collected under the pans in the soil of the tubs underneath.

All that is needed is to use plenty of dirt, and then there is no bad odor at all. In the south the disease called "Lumber-neck" will sometimes take a whole flock of chickens. They say that it is because birds will have found something dead and feed off the carcass, but the trouble is that they find a dead animal and eat the worms while they are yet "unripe" and then get the same thing that a man gets who eats a dozen ears of corn. The writer saw a man who ate thirteen ears at a sitting. The next day his wife was a widow. He had ptomaine poisoning. That is just what the birds get that eat the worms when they are not "cleaned off." It would be suicidal to feed them when the pan is hot and steaming with ammonia. By the way, if they get hot empty some of them into another pan, for they are too many for their living space, and they will "go dead" if they are not given more room. They must be fed more meat if their first installment does not grow them to their full size when this is done. Then when they leave the pans and go underneath it is perfectly safe to feed them. A pheasant will eat till it cannot swallow another one, take a little run around the yard and then come back and try it again. They cannot overeat on worms.

The majority of pheasant growers advise "egg custard" the first feed, and advise that nothing be left over from each meal lest it sour and give them the "collie ache." The writer finds it a whole lot easier to feed them on a mixture of finely chopped rape and rolled oats (just as used at the table, excepting that it is a cheaper quality), and then with this I mix ground liver. I feed it in little troughs so that I can put some out at night and have them eating long before I have finished my forty morning naps. In fact, I do not need to go to them till it comes time for their twice-a-day meal of worms.

A pheasant does not have to be very old to pick lettuce all to pieces, and they are surely mighty fond of it. It is the writer's plan to always weight it down with the edge of a box so that it will allow of bites being pulled off without its all coming with each bite, so that they get it sizable to suit their mouths. They grow much smoother plumage where they have green feed. Every pheasant grower should keep a good supply of lettuce growing. Lettuce for older birds should be almost old enough to go to seed, as then it has more milk in it and is stronger food. Birds, when molting, should be supplied with plenty of green feed. If you have no lettuce, then you can use rape or kale, but you will want to slice it fine, as they do not like the coarser stuff

enough to try to pick it off when it is tough.

It can easily be seen that all this is light work and very well adapted to the strength of a woman. One very salient feature about pheasant culture is the fact that when the birds leave the hen, which will be at the age of six weeks or thereabouts, the trouble is ended, for they do not even need a house, but will sit around on the ground, some together, some apart. They may leave their hen mother before you are aware, and if you will take the trouble to go out at nightfall you are liable to find them all sitting around on the ground. Then it is well enough, and will save you the trouble of tending to her, if you take the hen away.

It is being demonstrated right along that it is possible to hatch pheasants in incubators and raise them in brooders. Said Mrs. Selma Matheissen of San Lorenzo, who, by the way is making a name for herself as a pheasant grower: "I shall never use hens for anything again excepting my fancy stock, as I very much prefer the incubator and brooder for Ring-necks. I never saw a chicken that seemed to have so much sense about going into a brooder as the pheasants have."

Every grower who wants to make the most of her time should keep the Silvers, because they are beautiful and because the Silvers begin to lay a month before the other varieties, and one can get at the work of hatching earlier. When first hatched the Silvers are about the size and look very much like a Brown Leghorn; but in their characteristics they are very different, as they are slow and deliberate in their motions, with none of that nervousness possessed by the most of the other varieties. The variety that are available of the fancy varieties numbers well up into the hundreds, and more than that, for all that the writer happens to know to the contrary. Ring-necks are the foundation, and the fancy varieties are the fads and fancies that bring the big money. If you take up pheasant culture you will find that it will expand to meet your fondest ambitions and desires, and that you will not have much time for "shopping" if you attend to your birds yourself. The best of it is, however, if you have the shopping habit it will leave you as sin leaves the converted. An interesting and remunerative fad makes life worth living and death worth while.

THE PRICE OF POULTRY.

In reading the market quotations some of you may think the prices for hens are quite low when you see they are bought for \$3.50 to \$9 a dozen, but did you ever consider that those prices are quoted for table stock, irrespective of laying qualities, that is, they will pay those figures for culls and fat old hens which are no good for laying.

Even for table stock the prices are low, but if your hens are standard bred birds and fine layers, the fault is yours if you sell them at the prices of table stock or culls.

Because of the price of feed, the culling out necessary to get the finest layers and the consequent care to be given the pullets so selected, the present prices of laying stock in general are far too low, but consider where the fault lies.

One of the main reasons is that some breeders look at the market quo-

tations, then think that \$6, \$8 or \$9 a dozen is all they can get for their best pullets, and so they advertise those prices. Other men or women who have no initiative in their make up see the prices given and offer the same or lower, afraid the other fellow will sell everybody if they go higher.

Some of you may say you cannot get higher prices for your good stock, but did you ever try determinately and with consistency? If you have fine stock and know it, and if it was selected for the best laying qualities, did you place your beacon light on top of a hill and use printers' ink in advertising to the best advantage?

This is not a talk to boost the advertising department, for that section is well able to take care of itself, but this is a plain talk from one who has been there, who knows from present and past experiences that good prices can be had for good stock, but you have got to let the people know just what you have by placing the right kind of an advertisement in the papers read by the people buying or selling such goods, and do not be afraid to give plain prices, for the average man or woman gets interested in them, while many do not want to write for prices, wasting time and patience. You may often see the words, "Write for prices," and what for? Is the advertiser afraid to quote prices in public? Is he afraid one of his far away competitors will duplicate or lower them for his stock? Does he not know what he wants to get for the stock he is advertising? Does he have two or three prices for the same grade, or is he afraid to use a trifle more space?

Sometimes an intending purchaser writes for prices as requested, then finds all is sold. Or if for eggs for hatching the consequent delay is so long that he cannot wait. Do you suppose such results are conducive to getting customers? You may say the readers do not know the quality of the stock or eggs advertised, so that prices would seem too high for them. You certainly do, or should, know the quality and whether your prices are just and right for them, so you must have complete confidence in yourself and show it in your advertisement, or how can you expect strangers to get confidence in you?

It is an absolute fact that if you have good standard bred poultry, of fine laying strains, you can obtain from \$1 to \$5 per hen, according to breed, age and other qualities, but you cannot expect to sell at any price if you keep the news from the public that you want to sell your fine stock, and to get results which pay every time you must use space that those who skim over advertisements cannot fail to see it, and not expect a fortune from a small 50-cent advertisement.

On the other hand, every one interested in poultry should read every advertisement referring to that stock, whether intending to buy or not, and to get the habit of doing so, for you cannot tell how soon that method will be of benefit to you, instead of later losing time and patience in asking everyone where you can get certain stock or eggs.

Mongrels, runts and diseased poultry should have no place in any poultry yard.

It is not the quantity of feed, but the quality, variety and method of feeding which produces the eggs.

Questions and Answers

BY THE POULTRY SPECIALIST.

A valuable and instructive feature of our Poultry Department is "Questions and Answers." Any of our subscribers desiring advice or information upon any matter pertaining to poultry raising will please address Poultry Editor, The Live Stock and Dairy Journal, Sacramento, Cal., and answers will be printed in this department.

Poultry Editor The Live Stock and Dairy Journal—Will you please tell me if there are different types of Indian Runner ducks, as I have some which are browner in color than others, and somewhat running to a stripe in the mixture of brown and white. I will thank you for a reply in your valuable Journal.—W. N. S., Long Beach, Cal.

There are three types of Indian Runners—the penciled, which are undoubtedly the brown ones you mention, and they are the original Indian Runners, and are far better known in England than in this country. Then comes the fawn-and-white, which are somewhat of the appearance of patches of light brown and white, or fawn color. Last comes the pure white Indian Runners. The penciled have an appearance of thin stripes running to a pencil point, and so appear to have more dark color than the fawn-and-white.

Poultry Editor The Live Stock and Dairy Journal—In my flock I have a fine rooster, Black Minorca, which has lost an eye. Will it be advisable to use him for breeding? As you so kindly answered so many others in your paper I thought you would not mind replying to mine, for which I will be much obliged.—W. E. M., San Bernardino, Cal.

The accident of losing an eye will not matter in using him for breeding if he is vigorous and healthy. Pleased to reply to all queries any time.

Poultry Editor The Live Stock and Dairy Journal—I shall have a few chickens in January, and as I desire to keep them in a runway, would like to know if 40x25 feet is enough for fifteen layers and rooster. Also if you think advisable to have the roosts in slanting ladder-shape, which my husband advises.—Mrs. P. E. M., Bakersfield, Cal.

That size runway will be all right if you attend to them in feeding good at regular periods, and keep them clean. The right way to make the roosts is to have them all level, any distance you desire from the ground, not lower than a foot or higher than thirty inches, the short distance preventing any cause for bumble foot by jumping from a height, and the level plane of roosts giving no trouble by the hens fighting for highest place.

Poultry Editor The Live Stock and Dairy Journal—I have a pen of layers which produced fairly well up to molting time, but they are a mixed breed till we cannot tell what they are. I have also a pen of thoroughbred Leghorns which are poor layers. Will it be advisable to cross the Leghorns with mixed breed to get layers for next fall?—E. K., Roseville, Cal.

If they were mine I would sell them all off—the layers because they are no particular breed, and the Leghorns because they are poor layers—then buy good stock with the proceeds, even if I had to do with less number.

Give the birds clean nests and roosting places, study their likings and needs, and the egg yield should be increased.

THE STANISLAUS POULTRY SHOW

The Stanislaus Poultry Association will hold its second annual show at Modesto, Cal., December 18th-21st, all entries closing December 9th. It promises to be one of the best shows of the season. As will be noted in the display advertisement in this issue, the cash prizes are exceedingly liberal, and there are besides many beautiful cups to be given as special prizes. Seventeen silver cups have already been offered. Intending exhibitors should write at once to E. C. Nichols, Secretary, Modesto, Cal., for a copy of the premium list.

FEEDING FOR DECEMBER EGGS

There is no secret in feeding to get eggs when they are scarce and consequently high in price, but it certainly requires common sense and experience to know just what kinds of feed and the proportions, to get the best value in egg productiveness.

When hens are molting they get thin because they will not eat enough to fill out the quills and feathers, and to keep up their full quota of flesh and fat, the reason being they have not the appetite, similar to a person who is sick, so they require appetizing feed to tempt them to eat as much as possible. Then when over the molt they must be given full variety and plenty of it, for a thin hen is not the laying kind. She must have a full proportion of fat to be able to shell out the eggs.

There is certainly such a thing as having hens too fat for egg production, but this is not likely to happen around December, as a rule.

When hens do not lay some people get quite parsimonious in feeding, overlooking or failing to see they are cutting their purse at both ends by that method, and the biggest cut comes at the inlet, for the longer they fail to feed in good quality, quantity and variety, the time of unproductiveness will be greater in proportion, so that it may be February or March before the hens get down to business, when, with right feeding and proper care they would have laid in November and be in full laying in December.

You have first to get the hens in good condition after the molt, which means to put some fat on them, and, not least, weight also, quality and variety being the means to obtain those, and by that way of feeding there will be two purposes served. Their appetites will be catered to if off their feed, so they can eat more, and if any eggs have half formed the variety will help the production of them to completion.

You may give them abundance of feed in variety, but the latter may be of a nature to be of no help in egg production, or you may give them plenty of good quality but no variety, so again you would be minus eggs.

For egg production there are several things in feeding that cannot be dispensed with, and those are green stuff, animal food, shell, grit and cleanliness, not forgetting clean water daily, and among the animal foods there may be mentioned fish meal meal, blood meal, beef scraps and bone meal.

The proportions fed of each must be right or the end attained will not be the end sought, and though several good formulas may be given the following is a good one for the purpose: Fifty parts white bran, 25 shorts, 25 meal or corn meal, 10 parts fish meal or beef scrap, 5 parts of bone meal and a trifle fine charcoal, all mixed dry and given as a dry or crumbly mash; and, if the latter, equal bulk of short, green stuff, wet and mixed with the meals, adding water to make a crumbly mash, feeding as much as the layers will eat in half an hour. If fed as a dry mash to leave out the green stuff and mix twenty parts of alfalfa meal, placing all in a hopper where they can help themselves.

Plenty of green stuff at noon, in either case, shell and grit always before them, clean water every day and all the time, cleanliness from mites and lice, and for evening feed, equal parts of wheat, Kaffir corn, oats and cracked corn, thrown in litter if possible, the amount being generally a quart to ten layers, the same feeding applying to pullets, and remember in every case it requires persistent and regular feeding to produce good results.

INFERTILE EGGS.

Hatching season has commenced, and with it often comes the question, "Why are some of the eggs infertile?" which can be replied to by studying the following causes and making your own deductions therefrom.

Sometimes there may be too many in the pen of layers, for a rooster of light weight breeds should have an average of fifteen hens, while the heavy weights should have but ten to twelve.

On the other hand if too few females the rooster may be an active bird and so harass them that they fight him off.

Sometimes a male is so gallant that he allows the females to practically take all the food, with the result that he goes short on rations.

Often the rooster is sluggish or too

old, so that he cannot take care of the allotted hens.

Once in a while the rooster is a glutton, and all he seems to care for is his appetite, even to fighting the hen to satisfy it, which reminds the writer of a man who said that the best rooster was one which got his fill good and plenty, but it was very noticeable that same man was a glutton in eating and drinking, and was the poorer specimen of a human male in providing for his family next to actual starvation.

See your rooster is strong, spry, virile, alert, full of life, vim and energy—one which clucks to the hen with tit-bits, yet attends to his own material wants, and you will get the best half of the pen.

From the feed the hen must get lime for the shell, oils and minerals for the yolk and albumen for the white.



THE KING OF ALL BROODING SYSTEMS Is the death blow to sweat boxes and dirt trays. It gives your chicks the same living conditions as your children with better ventilation. Oil flow and heat AUTOMATICALLY controlled. The stove that never goes out or crazy. Good 300 to 1500 chicks.

Get our Catalogue with beautiful souvenirs FREE.

Pride of Petaluma Brooder Stove Factory, J. E. KRESKY, Mfg., PETALUMA, CAL.

BRED FOR EGGS AND MEAT
 * Bellevue strain of White and
 * Columbian Wyandottes, S. C. White
 * Leghorns and Light Brahmas. Stock
 * for sale. Over thirty years in business.
 * MICHAEL K. BOYER,
 * Box L,
 * Hammonton, Atlantic County, N. J.

ASK YOUR DEALER FOR EL DORADO COCOANUT OIL CAKE MEAL

—for—
CHICKENS, MILK COWS, HOGS AND YOUNG PIGS.
 Cheapest Food in the Market Today. If Your Dealer Doesn't Carry It Address:

EL DORADO OIL WORKS,
 149 California Street, San Francisco

Chinese Ringneck Pheasant

Young Stock and Eggs for Sale
MARY P. MARSHALL
 345 South American St. Stockton, California

CASTRO HILL GAME FARM

WHITE AFRICAN GUINEAS.
PHEASANTS—Chinese Ring-Neck and Golden.
ORPINGTONS—Buff, White and Black.
COCHIN BANTAMS—White and Buff.
 Visitors Welcome.
 Phone: Farmers 240. **MELLETT & CO., R. 3, Box 33, Hayward, Cal.**

ROUP

Contagious Catarrh, Swelled-Head, Chicken-Pox, Diphtheria and similar contagious diseases of chickens, including Black-Head of turkeys, can be easily cured by using **DR. WHEELER'S SPECIFIC No. 1** in the drinking water, and it is sold by

J. E. HOLT, Sunland, Cal.

for \$1. and 5 cents postage, with expert advice free. Scores of unsolicited testimonials.

Also best remedy, "**RAISALL**," for White Diarrhoea and Cholera of chicks at same price.

Poultry Breeders' Directory

Under this heading, for a nominal charge, payable in advance, we will insert names and addresses of breeders of various varieties of poultry. This is done for the convenience of owners of flocks who wish to keep their names before the public the year round. Display advertising is undoubtedly the big business getter of today, but no doubt there are many breeders who are not justified in carrying a display ad during the entire year. To such breeders the economy and convenience of this column is readily apparent.

S. C. WHITE LEGHORNS.

M. Duttbernd.....Petaluma, Cal.
J. B. Carrington.....Hayward, Cal.
J. H. Meyer.....R 3, Modesto, Cal.

RHODE ISLAND REDS.

Manor Farm.....Petaluma, Cal.

BARRED PLYMOUTH ROCKS.

P. W. Hardman.....Volta, Cal.
J. H. Frew.....Tulare, Cal.

BUFF ORPINGTONS.

J. E. Futrell.....Visalla, Cal.

WHITE ORPINGTONS.

Mrs. O. S. Moore, R. 1, Bx. 49, Modesto.

WHITE WYANDOTTES.

M. A. Pilgrim.....Chico, Cal.
A. L. Jenkins.....Sebastopol, Cal.

BUFF LEGHORNS.

P. Ellis.....R. 3, Modesto, Cal.
J. L. Meadows.....Hanford, Cal.

ANCONAS.

D. E. Palmer.....Dinuba, Cal.

BLACK MINORCAS.

J. P. McDonough.....Geyserville, Cal.

BUFF MINORCAS.

Mrs. I. H. Tuttle.....Watsonville, Cal.

S. C. RHODE ISLAND REDS.

Mrs. M. A. Saylor.....Orland, Cal.
B. H. Brubaker.....Corning, Cal.
H. E. Hill.....R. 6, Box 90, Hanford, Cal.

SILVER-SPANGLED HAMBURGS

H. E. Hill.....R. 6, Box 90, Hanford, Cal.

PEKIN DUCKS.

W. F. Heusel.....Hanford, Cal.

S. C. White Leghorns

Our birds won every first, second and two third prizes and three specials at the Petaluma Poultry Show, 1911. Circular Free.

M. DUTTBERND,

R. 1, Box 92-3, Petaluma, Cal.

VILLA MARIA

DUX! DUX!

Standard-Bred.

Buff Orpington, White Indian Runner and Fawn and White Indian Runner Ducks.

CHARLES V. PARKER,

P. O. Box 124, Hanford, Cal.

One of the most difficult problems for the poultryman to solve is how to easily provide pure, fresh water for his fowls.

TO PROTECT POULTRY.

Congressman Mann from the Chicago district has introduced a bill known as H. R. 22330, for the prevention of cruelty to poultry in transportation. The bill has been referred to the Committee of Interstate and Foreign Commerce. It provides that any live poultry shipped must not be without food or water more than twenty-four hours. In this time is reckoned any delay at station. It also provides that all coops or carriers must be properly ventilated, not overcrowded, nor shall the coops be too low to inconvenience the poultry. It imposes upon the agents of the transportation companies on loading to insure proper ventilation and have air freely circulated around the coops and that all cars or other receptacles in which the coops are loaded shall be ventilated. It requires that all agents of carriers, accepting live poultry, must examine the stock and remove from the coops all sick, injured or dead birds and that the carriers must examine the shipments every four hours and all dead or injured stock must be removed whenever found. The bill also provides that all live poultry in transit or at stations must be protected from too much heat or too much cold. The penalty is not less than \$100 or more than \$200 for each offense. It imposes upon the United States District Attorney in each section to prosecute these violations.

It is understood that the National Poultry and Game Association will take some action in regard to this matter, and have the bill properly amended or constructed to meet the requirements of the trade.

TRUTHS FOR THOUGHTFUL READERS.

Good and clean feed, variety, right proportions, enough of it, system in giving it, timing the feeding at the same hour each day, keeping to the same formula in mashes and grains, supplying plenty of green stuff, clean water, grit and shell are the main things in helping to fill the egg basket, and not overlooking cleanliness, whether in December or July.

The finest layers can quickly be spoiled by indifferent, careless or wrong feeding and management.

If chickens seem to be a nuisance on the general farm by staying too near the kitchen door it is because the management is poor in allowing them there, for they would be better off further away behind a fence, and would do better in laying.

The hen that reverts somewhat to the wild is not the best layer, no matter what she could do, but the finest layers are those kept behind a fence and rightly cared for—that is; if they are a good laying strain.

The rooster is the best half of the pen, and now is the season to get a good one, for it will pay.

THE MANOR FARM

C. S. WAKEFIELD, Prop
PETALUMA, CAL.

RHODE ISLAND REDS

Made another sweep of ribbons at San Jose taking also cup for Best Display of Rhode Island Reds in the show and cup for Best Rhode Island Red male AT TWO SHOWINGS ONLY THIS SEASON WE HAVE WON FORTY RIBBONS. TWO CUPS, EIGHTEEN SPECIALS.

Some choice stock for sale at right prices. Also eggs, chicks and stock from S. C. White Leghorns and S. C. Black Minorcas.

MANOR FARM, PETALUMA CAL.

STANISLAUS

POULTRY SHOW

Dec. 18-21, 1912

Held at MODESTO, CALIFORNIA

Entry fee, 25c for singles and \$1 for exhibition pens. Prizes for pens \$150 first, \$2 second and \$1 third. Singles \$150 first, \$1 second, 50c third.

Write for Premium List to

F. C. NICHOLS,

Secretary,

Modesto, Cal.

WE WILL SEND YOU OUR BOOKLET "CHICKENS" FREE

It contains much valuable information for the poultry raiser. Has chapters covering every subject, from hatching to market. Tells how to be successful with poultry. Don't fail to send for this booklet today. Study it carefully and learn more about a very profitable industry.

Coulson Poultry and Stock Food Company
PETALUMA, CALIFORNIA.

E. B. NEILSON, Oroville, California

BREEDER OF

SILVER LACED WYANDOTTES

On Three Entries at California State Fair I Won Two Firsts and One Second. Nothing to Sell Until After January 1st.

White Wyandottes

If you want the best in California, in Stock and Eggs, ultimately you will have to come to me.

Cockerels\$5.00 to \$25.00
Hens3.50 to 5.00
Pullets3.00 to 10.00
Eggs.....\$4.50 and \$10.00 per 15

A. L. JENKINS,

Sebastopol, California.



PACIFIC COAST LAYING CONTEST

To Be Conducted by Napa County Poultry Association, Napa, California

From January 8th to June 8th, 1913

SOMETHING FOR UTILITY POULTRY

Pens of Six Birds.

Rules, Regulations and Prize List Will be Ready November 10, 1912.

This contest will take the place of the contemplated Poultry Show on December 19-22, 1912. Extensive arrangements will be made for the proper housing and feeding of the birds and the yards will be cared for by men who have had many years of success in the business. We conducted a very successful show last year, and know we can conduct a successful laying contest.

Napa County Poultry Association

NAPA, CAL.

WALLACE RUTHERFORD, Secretary.

CLASSIFIED ADVERTISEMENTS

Rates—Two cents per word each issue. Minimum, 50 cents. Abbreviations and initials count as a word. Count every word in the advertisement

POULTRY.

BARRED PLYMOUTH ROCKS—New York, Topeka and Kansas City Winners. Eggs for hatching from twenty grand yards. Choice stock for sale. Sixteen years breeding Barred Rocks exclusively. Charles H. Vadden, Box 396, Los Gatos, Cal.

BLUE ANDALUSIANS of the strain of the VISALIA POULTRY CO. are winners of all the blue ribbons and cups wherever entered. Eggs only this season. First pen headed by the famous "Bamboo" Standard of Perfection. Visalia, Cal.

CHICKS! CHICKS! CHICKS! 10c UP—We ship everywhere. Send today for 66-page catalog, illustrated. PULLETS 2, 3, 4, 5 and 6 months of age. Fine White Leghorns 10 to 12 months of age, \$9 per dozen. Write us your wants today. The Pioneer Hatchery Co., 112 E. Eighth Street, Los Angeles, Cal.

PRIZE HOUDANS—Catalogue now ready. Mrs. Emma F. Reid, R. F. D. 4, Box 64, San Jose, Cal. Life member American Poultry Association.

BUFF MINORCAS, BARRED PLYMOUTH ROCKS, WHITE PLYMOUTH ROCKS, BLUE ANDALUSIANS—For immediate delivery we offer fifteen choice Buff Minorca cockerels, Hatching eggs after January 1st. Baby chicks early in February. Place your order now. Cedarhurst Ranches, R. 2, Box 148½, Sacramento, Cal.

FOR SALE—Cook's strain White Orpington cocks, cockerels, hens and pullets. Also White Wyandotte cocks and hens. Correspondence solicited. Dr. V. E. Watson, Castroville, Cal.

S. C. BLACK MINORCAS AND WHITE LEGHORNS A SPECIALTY—Other varieties a matter of correspondence. Prices reasonable and worth the money. N. E. Boone, Visalia, Cal.

BARRED ROCKS ONLY—If you want show birds, good breeders, fine utility stock or good hatching eggs write us. G. L. Hawley, Madera, Cal.

CORNISH INDIAN GAMES—The finest table fowl on earth; the best I could find in England. RICHARD KEATING, Palo Alto, Cal.

SCHELLVILLE HATCHERY—Thoroughbred White Leghorn chicks shipped on approval. Examine at your home before remitting. No weak ones charged for. R. F. D., Sonoma, Cal.

MAMMOTH BRONZE TURKEYS.

INTERNATIONAL TOM—Largest turkey and the greatest prize winner in the world, heads the flock. On account of the large number raised this year I am now making EXTRA LOW SPECIAL PRICES. They have large bones, long bodies, full breasts, are early maturing and well marked. Largest flock of purebred turkeys in the world. Order soon and secure the best. Geo. A. Smith, Corcoran, Cal.

INDIAN RUNNER DUCKS.

FOR IMMEDIATE SALE—Twenty fine young Indian Runner Drakes, ready for service in December. Cedarhurst Ranches, R. 2, Box 148½, Sacramento, Cal.

INDIAN RUNNER DUCKS—My stock took two first and three seconds at Stockton show. Stock and eggs for sale. Mrs. M. V. Peyton, 1112 E. Washington Street, Stockton, Cal.

LIVE STOCK.

O. I. C. PUREBRED REGISTERED HOGS—Young stock, both sexes. Write for prices. Pedigrees guaranteed. Best foundation stock in State. J. W. Benoit, R. 2, Modesto, Cal.

SWINE FOR SALE—I can provide you with Poland China, O. I. C. Hampshire and Berkshire young stock of both sexes. Purebreds. Prices right. Jas. Willison, R. 4, Modesto, Cal.

O. I. C. HOGS—I breed purebreds only. All registered, and papers go with all sales. Sire, Creamery Sport, whose sire is Martin Sport; dam, Pansey Blossom. Have six 1-year-old sows for sale. Also young stock coming along. Write me to reserve your orders for young stock of both sexes. M. A. McLean, Route 5, Modesto, Cal.

What Have You to Sell or Exchange?

No matter where you live in California, Arizona, New Mexico, Utah, Nevada, Idaho or Oregon, the Classified Advertisements in the JOURNAL are read by your neighbors. Perhaps some one within ten miles of your home wants to buy just what you want to sell, and would buy from you if he knew what you have. Tell him what you have through this classified page.

WHEN YOU DESIRE SWINE, remember that I am a breeder of purebred O. I. C., and can supply you with young sows and boars out of famous dams and by prize winning sires. Best Eastern and California blood. Write for prices and pedigrees. Can give immediate delivery. R. A. East, R. 2, Modesto, Cal.

I have a few purebred Holstein bull calves out of my best registered cows for sale. These young males are choice bred. Have many registered cows coming in this fall. Write now and engage their offspring. For prices and pedigrees write B. F. Anderson, Modesto, Cal.

FOR SALE—Registered service Jersey bulls and bull calves from prize winners and big producers. Unregistered Jersey bull calves at \$25 each from registered sires and choice Jersey cows. Dairymen's opportunity. Seventy acres choicest Mokelumne River Bottom Land; will produce five crops alfalfa without irrigation; improvements, two large stock barns, skimming station, house, sheds, Bartlett pear orchard. Gaited saddle, driving and business horses. A licensed imported German coach stallion. N. H. Locke Co., Lockeford, Cal.

JERSEY BULL CALVES FOR SALE—By such sires as Mona's Topper and Oxford Victory and others, by famous sires and out of real cows. Write or call. Weaver Stock Farm, Brawley, Imperial Co., Cal.

HOLSTEIN BULLS FOR SALE—Purebred, registered, fine young fellows. For years and years I have given attention to building up a herd of Holsteins. It has been my life work. Have a son of Princess Ziska, also a son of Lady Bountiful Faskie, sired by Modesto Boy. Also yearling by Constance Sir De Kol. M. A. McLean, Route 5, Modesto, Cal.

POLAND CHINA SWINE FOR SALE—Registered stock of the best strains in California. All stock sold registered. E. F. Bradley, Box 22, Hanford, Cal.

FOR SALE AT A SACRIFICE—One black 3-year-old Percheron stallion. Can be seen at San Mateo. Can also show his colts. For particulars and price write or call. A. W. Ward, Burlingame, Cal.

HOLSTEIN BULLS FOR SALE—Two young bull calves. Both registered and of good parentage on both sides. The mothers of both are daughters of A. R. O. cows. Will sell these calves at \$75 each. Also have one registered 3-year-old Holstein bull for sale. For pedigrees and particulars write or call. C. L. Morse, R. 5, Modesto, Cal.

PUREBRED REGISTERED PERCHERONS AND BELGIANS—A few choice young stallions from 3 to 5 years old. Also 2 and 3-year-old Percheron fillies for sale. Los Altos Stock Farm, Los Altos, Cal.

HAY, GRAIN AND FRUIT.

L. V. FLETCHER, 125 SO. COURT ST., Visalia, Cal.—Wholesale dealer in citrus and deciduous fruits, hay and grain. Largest independent hay center in Tulare County. Terms cash.

FARM LANDS.

LARGE AND SMALL FARMS, grain and dairy ranches for sale in Modesto and Turlock irrigation districts. Terms and prices on application. Stanislaus Real Estate Company, Modesto, Cal.

THE MODESTO CREAMERY INVITES HOMESEEEKERS AND DAIRYMEN of California to visit a thriving community, where water is King, due to the best irrigation system in the West. Alfalfa flourishes in Stanislaus County and Modesto and its surroundings boasts of more purebred dairy stock breeders than any other city in California. Modesto Creamery has its own ice plant, which is second to none in the San Joaquin Valley. Lowell Gum, Manager Modesto Creamery, Modesto, Cal.

DAIRY RANCHES.

I am in position to sell you land, improved or unimproved, in the far-famed county of Stanislaus, the first in butterfat production in California. Modesto, the county seat, has many fine dairies. I have a great many listed to sell. Irrigation is a success here and water is King. No saloons in Modesto-Turlock Irrigation District. Write me. Lon J. Coffee, Modesto, Cal.

A FINE 259-ACRE DAIRY AND STOCK FARM—Well equipped, with eighty acres of alfalfa, well irrigated from ditch and electric pumping plant. Situated in Western Sacramento Valley. With or without stock. Rare chance for person looking for something good. Description and price upon application. Address Box 7, care Live Stock and Dairy Journal, Sacramento, Cal.

MUST SELL AT ONCE—40 acres or more of choice Sacramento silt loam. Now producing six crops alfalfa per annum. Sub-irrigation. Close to market. Good transportation. Price right. John S. Lawson, 1221 Union Street, San Francisco, Cal.

IRRIGATED LAND FOR SALE—Improved dairy ranches, 240 and 360 acres, all improved ready for occupancy. In the best section of Merced County, Cal. Also have small, highly improved ranches for sale or rent. No better land in State. J. E. Hollingsworth, Gustine, Cal.

40 ACRES WELL IMPROVED—Alfalfa, orchard and vinyard land. Also 30 acres improved near Turlock, Cal. First-class buildings. Terms upon application. K. Knutson, Turlock, Cal.

WILL SELL ALL OR PORTION of fine sub-irrigated, 75-acre ranch. Ideal place for alfalfa or truck gardening. Ready market for products. Cheap transportation. T. M. Marois, Hotel Clunie, Sacramento, Cal.

80 ACRES—Forty Acres in alfalfa. Good water right, deep, sandy loam, well suited to all deciduous fruits. Adjoins city limits. Adjoining property is all improved. Would make a splendid home for a homeseeker. Price \$13,500. Long time terms if desired.

400 ACRES—Four miles from Tulare; 100 acres growing alfalfa. This tract is well suited for a dairy farm; gravity water, right from river; also electric pumping plant in operation being a competent water right; large oak trees on property; good farm buildings. Price \$96,000. Extended terms if desired. Correspondence invited. This property will stand investigation. BECKWITH-ANDERSON LAND CO., Incorporated, Tulare, Cal.

DAIRY RANCHES, IMPROVED AND UNIMPROVED—For sale or rent. Correspondence invited. References, any bank in Newman. Chas. B. Cleaves & Co., Newman, Cal.

IMPROVED AND UNIMPROVED LAND—Pumping plants installed where needed. References, any local bank. Write for full information. C. C. Snyder, Selma, Fresno County, California.

HAVE 20 ACRES choice fruit and alfalfa land. Need some money. Will sell cheap to right party. F. Hullinger, 520 K Street, Sacramento, Cal.

ALFALFA SEED.

ALFALFA SEED FOR SALE—Crop 1912. Absolutely free from noxious seeds. Address, V. A. Peterson, Blacks, Cal.

POSITION WANTED—A graduate of the Agricultural College of California, age 25 years, desires position on hog or dairy ranch. Will work for an interest in the business. Can furnish best of character references. Address, E. S. W., 188 Ridgeway, Oakland, Cal.

SECOND-HAND AND NEW WATER PIPE.

All sizes standard pipe and wrought iron screw casing pipe; guaranteed as good as new. Write for prices.

WEISSBAUM PIPE WORKS, 162 Eleventh Street, San Francisco.

HOTELS.

HINMAN HOTEL, LINDSAY, CAL. Phone 344. Best Rooms. Home cooking. Auto service in connection. Transient trade solicited. Visiting homeseekers welcome. Information gladly furnished.

WHERE TO EAT.

OPERA RESTAURANT, HANFORD, CAL.—Phone Main 436 R. Meals a la carte. Private family boxes. Best service. Prices reasonable. Stockmen welcome.

LINDSAY GRILL, LINDSAY, CAL.—Café depot. Meals a la carte. Private family tables. Open at all hours. Popular prices. Only first-class grill city.

GARAGES AND AUTO LIVERIES.

COLE & READ, AUTO LIVERY—City Stand and Billiard Room, 118 N. Irwin, Hanford, Cal. Auto service at all hours. Oldest established service. Stockmen's headquarters. Phone 377.

FORD GARAGE, TURLOCK, CAL.—Auto service at all hours. Repairs furnished for all cars. A full line of accessories. Full information to homeseekers free given.

HARNES OILING.

CHEAPER THAN YOU CAN DO IT—Largest harness oiling plant in San Joaquin Valley. Heavy harness washed and oiled, \$1.50 per set. Single harness 75c. Visalia Harness Co., Visalia, Cal.

MOTORCYCLES AND BICYCLES.

TURLOCK CYCLERY, TURLOCK, CAL. Harley Davidson and Indian Motorcycle agency. General repairing and all accessories for motorcycles and bicycles. Satisfaction guaranteed. Reasonable prices.

HELPFUL PARAGRAPHS.

It does not pay to feed scrubs, mongrels or stumpy specimens with good feed. Sell them.

Feeding grain on bare ground or troughs does not pay, and if on large range it should be well scattered where, if there is growing grass which it may be thrown, so much the better.

For something to correct wrong feeding or to purify the blood, there is nothing easier and better than charcoal with green stuff.

To obtain eggs which have good colored yolks green stuff must be part of the feeding, which also sustains the health.

Turkeys require a grass range to well, for they will not stand confinement like chickens, and the larger the range the better, as grass and insects are the natural food for them.

Never sell the finest specimens turkeys or chickens. Keep them breeding.

Ducks will not thrive on grain, they are built differently than turkeys, but mashies should form nearly all their bill of fare.

It is better to feed grain at night as it takes longer for it to assimilate than mashies, and the latter should be fed for the first feed of the day.

San Joaquin Poultry Show

The 1912 San Joaquin Valley Poultry Show did not bring out as many exhibits as last year, but it brought out unusual quality. A large percentage of the best birds shown were from Eastern stock, and although they can not be placed to the credit of California production yet, they should produce winners in future shows which will reflect credit upon local breeding.

Twin Oaks Farm had one of the greatest showings ever made by a poultry farm on the coast, and were practically invincible with all breeds they showed except Barred Rocks. In the Barred Rock classes E. A. Pyke of Oroville provided the sensation of the show when he went up against a long line of entries with only nine birds. Besides six ribbons the Pyke Barred Rocks carried off every special for the breed. This was a remarkable performance when we consider the great number of Barred Rock entries and the quality of competing entries.

M. Dutthernd made a great showing with White Leghorns and took down most of the individual ribbons.

A. L. Jenkins was right among the top-notchers with his White Wyandottes and carried away a good lot of ribbons.

Guy H. Miller of Modesto showed a few White Plymouth Rocks and pulled down a few ribbons.

H. Maltester of Napa Junction made numerous winnings in the Black Orpington classes, although in the hen class, W. H. MacKay took all three prizes.

A. Soderquist of Turlock showed several breeds, his Brown Leghorns being especially good.

There was a good showing of Indian Runner ducks, Goodacre Brothers and Mrs. Lingo dividing ribbons with the Whites, while Mrs. M. V. Peyton of Stockton made a clean sweep in the Fawn and White classes.

The awards follow:

Barred Plymouth Rocks.

Cock—First and second, Twin Oaks Farm; third, E. A. Pyke.
Cockerel—First, E. A. Pyke; second, Twin Oaks Farm; third, Henry Grube.
Hen—First and second, E. A. Pyke; third, Twin Oaks Farm.
Pullet—First and second, E. A. Pyke; third, Twin Oaks Farm.
Pen—First and second, Twin Oaks Farm; third, Henry Grube.

White Plymouth Rocks.

Cock—First, Ranch 10; second, Mrs. George W. Santos; third, Guy H. Miller.
Cockerel—First, Twin Oaks Farm; second and third, J. F. Dentoni.
Hen—First and second, A. W. Cowell; third, Ranch 10.
Pullet—First, Lodi Normal; second, J. F. Dentoni; third, Guy H. Miller.

Partridge Plymouth Rock.

Cockerel—W. H. Kelley; second, Mrs. L. Dugan; third, W. H. Kelley.
Pullet—First, W. H. Kelley; second, A. Soderquist; third, Mrs. L. Dugan.
Pen—First and second, W. H. Kelley; third, Thomas R. Quayle.

White Wyandotte.

Cock—First and second, Twin Oaks Farm; third, A. L. Jenkins.
Cockerel—First, Twin Oaks Farm; second, A. L. Jenkins; third, Twin Oaks Farm.
Hen—First, Twin Oaks Farm; second, A. L. Jenkins; third, Twin Oaks Farm.
Pullet—First, Twin Oaks Farm; second, A. L. Jenkins; third, Twin Oaks Farm.
Pen—First, Twin Oaks Farm; second, A. L. Jenkins.

Silver-Laced Wyandottes.

All awards to A. M. Lease & Son.
S. C. Rhode Island Red.
Cock—First, Goodacre Brothers.
Cockerel—First, J. L. Harrison; second, Mrs. R. S. Spaulding; third, W. G. Micke.
Pullet—First, J. L. Harrison; second and third, B. C. Quessenhury.

White Minorcas.

Cockerel—First, second and third, H. Elbert Smith.
Pullet—First and second, H. Elbert Smith.
Hen—First, M. A. R. Poultry Yards; second, H. E. Smith.

Black Langshans.

Cock—First, William T. Blakely; second and third, George A. Janssen.
Cockerel—First and second, C. E. Ross; third, J. B. Watson.
Hen—First and second, C. E. Ross; third, George A. Janssen.
Pen—First, George A. Janssen; second, C. E. Ross.
Pullet—First, J. B. Watson; second and third, C. E. Ross.

White Orpingtons.

Cock—First, second and third, Twin Oaks Farm.
Cockerel—First, Lodi Normal; second, Twin Oaks Farm; third, J. E. Bairos.
Hen—First, Twin Oaks Farm; second, Bertha Hagedorn; third, Twin Oaks Farm.
Pullet—First, Twin Oaks Farm; third, J. E. Bairos.
Pen—First, Twin Oaks Farm; second, Lodi Normal.

Buff Orpingtons.

Cock—First, Twin Oaks Farm; second, Mrs. M. E. Plaw; third, Twin Oaks Farm.
Cockerel—First, S. S. Strobbridge; second, Twin Oaks Farm; third, George F. Buck, Jr.
Hen—First, Twin Oaks Farm; second, Mrs. C. M. Smythe; third, Twin Oaks Farm.
Pen—First, Twin Oaks Farm; second and third, Mrs. C. M. Smythe.
Pullet—First, Mrs. R. S. Spaulding; second and third, Twin Oaks Farm.

Black Orpingtons.

Cock—First, D. A. Macdonald; second and third, H. Maltester.
Cockerel—First, second and third, H. Maltester.
Hen—First, second and third, W. M. MacKay.
Pullet—First, Thomas B. Buck; second and third, H. Maltester.
Pen—First, H. Maltester.

Partridge Orpingtons.

All awards to Goodacre Brothers.
Hamburgs, Silver-Spangled.
Cock—First, J. W. Wheatley.
Cockerel—First, Mrs. W. H. Chestnutwood.
Hen—First, second and third, Mrs. W. H. MacKay.
Pullet—First, J. W. Wheatley; second, Mrs. W. H. Chestnutwood; third, J. W. Wheatley.

White Langshans.

Cock—First, C. E. Ross.
Cockerel—First and second, M. W. Nicholson.
Hen—First, C. E. Ross.
Pullet—First, M. W. Nicholson.
Pen—First, M. W. Nicholson.

Blue Andalusians.

All awards to Albert Hornung.
Light Brahmas.
Cock—First, A. L. Jenkins.
Hen—First, A. L. Jenkins; second, W. A. French.
Pullet—First, W. A. French; second, Manor Farm.

Houdans.

Cock—First, W. A. French.
Cockerel—First, W. A. French.
Hen—First, Edwin Richards; second, W. A. French; third, Edwin Richards.
Pullet—W. A. French.

White Cochins.

All awards to William T. Blakely.
Buff Cochins.
Hen—First, Edwin Richards.

Black Minorcas.

Cock—First, A. W. Cowell; second, Ranch 10; third, A. W. Cowell.
Cockerel—A. W. Cowell; second, W. A. French; third, A. W. Cowell.
Hen—First, Ranch 10; second, W. A. French; third, A. W. Cowell.
Pullet—First, W. A. French; second and third, A. W. Cowell.
Pen—First, A. W. Cowell; second, W. A. French; third, A. W. Cowell.

Buff Minorcas.

Cock—Second and third, C. A. Tyrell.
Cockerel—First, second and third, C. A. Tyrell.
Pullet—First, second and third, A. Soderquist.
Pen—First, second and third, C. A. Tyrell.

White Leghorns.

Cock—First and second, Dutthernd; third, Schmidt & Gunther.
Cockerel—First, second and third, Dutthernd.
Hen—First, Dutthernd; second, Schmidt & Gunther; third, Dutthernd.
Pullet—First, Dutthernd; second, Schmidt & Gunther; third, Dutthernd.
Pen—First, O. B. Morris.

Brown Leghorns.

Cock—Second, William A. French.
Cockerel—First, A. Soderquist; second, O. E. Crawford; third, A. Soderquist.
Pullet—First, Ranch 10; second and third, O. E. Crawford.
Hen—First, O. E. Crawford; second, A. Soderquist; third, William A. French.
Pen—First, O. E. Crawford; second, A. Soderquist.

Buff Leghorns.

Cockerel—First, second, Manuel Roberts; third, J. A. Hayes.
Hen—First, G. L. Meadows; second and third, J. A. Hayes.
Pullet—First, A. Soderquist; second, G. L. Meadows; third, A. Soderquist.

Black Leghorns.

All awards to Frank Liegiger.
Partridge Cochins.
All awards to Mrs. J. F. Dentoni.
Silver Campines.
All awards to Mrs. L. Dugan.
Golden Campines.
All awards to Mrs. Ellen Jacque.
Penciled Indian Runner Ducks.
Old Duck—First, Mrs. M. E. Plaw.
Young Duck—First, Charles F. Holman.

Pekin Duck.

Old Drake—First, Mrs. T. W. Carpenter.
Young Drake—First, L. R. McCoy; second and third, Charles L. Holman.
Old Duck—First, T. W. Carpenter.
Young Duck—First and second, Charles F. Holman; third, L. R. McCoy.
Fawn and White Indian Runner Duck.
All awards to Mrs. M. V. Peyton.

White Indian Runner Duck.

Old Drake—First, Mrs. A. H. Lingo; second, Goodacre Brothers; third, Mrs. A. H. Lingo.
Old Duck—First, Mrs. A. H. Lingo; second, Goodacre Brothers; third, Mrs. A. H. Lingo.
Young Drake—First, Goodacre Brothers; second and third, Mrs. A. H. Lingo.
Young Duck—First, Goodacre Brothers; second and third, Mrs. A. H. Lingo.

Toulouse Geese.

Young Gander—First, L. R. McCoy.
Young Goose—First, L. R. McCoy.

Bronze Turkeys.

Old Tom—First, C. L. Griffith; second, Ed Hart; third, Maud Maltester.
Old hen—First and second, Ed Hart; third, Maud Maltester.
Young cockerel—First and second, Ed Hart.

Yearling cock—First, Maud Maltester; second, O. B. Morris; third, Ed Hart.

Young hen—First, Ed Hart.
Pullet—First and second, Ed Hart.

Bourbon Red Turkeys.

Old Tom—First, W. A. French; second, W. E. Speer.

White Holland Turkeys.

Old Tom—First, Henry Grube.
Cockerel—First, Vernon Morrow.
Old hen—First, Henry Grube; second, Vernon Morrow.

EGG FACTS.

Clean nests and runways mean clean eggs, which mean less labor and better sales, but if eggs do get soiled in wet weather you can easily clean them by rubbing the stains with a little scouring soap on a wet cloth.

Firmness in the shell means fewer cracked eggs and easier handling, which can be attained by supplying the layers with oyster or clam shell, where they can get some any time.

Eggs with good yellow yolks and tenacious whites are the kind which sell for the highest quotations after candling, and any hen, if healthy, will lay that kind if she gets plenty of green stuff, good grains, meals in right proportions with a small per cent of animal food such as fish meal meal, blood meal or beef scraps, and again plenty of green stuff.

Watery eggs are caused by keeping too long, having them in a warm room day after day, or by feeding the

layers condiments or too much forcing material, or by other wrong feeding and they are the eggs no good wants.

A new laid egg which is not water will beat up for frosting in less time and with greater stiffness or consistency than a stale, cold storage poorly produced egg.

Eggs which are musty in taste odor show that the germs of decay have taken possession, and the cause may be storing too long or keeping them in a damp or musty room.

Soft-shelled or thin eggs can easily be avoided if the hens are given short or lime, unless their happens to be ovarial trouble in some particular hen then other treatment is required.

It is not a question of how much work to find, but how to do all in the shortest time by plan and good system.

PARALLELOGRAMS IN THE POULTRY BUSINESS.

Most of these are odds. The balance are ends.

A hen can quickly find a small hole to sneak outside the fence, but she will race past the gate when she should go in. Some men are like those hens—they want to sell their products, but they cannot see the opportunities of circulation, advertising and printers' ink.

All the cacklers are not layers, some hens will cackle long and loud when they see another hen on a nest. A few men are similar to the hens, as they will often speak things of which they know nothing and will sometimes condemn an article of which they are ignorant.

Once in a while you will find a hen on the nest which you think wants to lay, but she is a fake. She wants to sit. Sometimes you will come across a man who pretends to know everything, with a good deal added, about the chicken business, but you will soon find out he is a fake and a pretender.

If a hen gets good care each day, right feed in proper proportions she will lay good and steady. That part of her system if she is of the laying type.

Judges at Stanislaus Show



MR. JAMES D. YATES, MODESTO, CAL. Mr. Yates is an Eastern judge and breeder of Black Minorcas, having won clean sweeps at large shows, such as Kansas City, St. Joseph, Topeka and Iowa State Show. Mr. Yates' work being entirely satisfactory last year the Stanislaus Poultry Association re-engaged him for the coming show. His classes will be the American and Mediterranean.



MR. ROBERT V. MOORE OF OAKLAND, CAL. Mr. Moore is well known among most of the exhibitors of California, judging many of the large shows of the Stanislaus Poultry Association. Modesto, Cal., were anxious to have Mr. Moore return again as one of the judges his past work being entirely satisfactory. Some of the shows Mr. Moore judged this year are State Fair, Modesto, Stockton, Pasadena, Oroville and Los Angeles.



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